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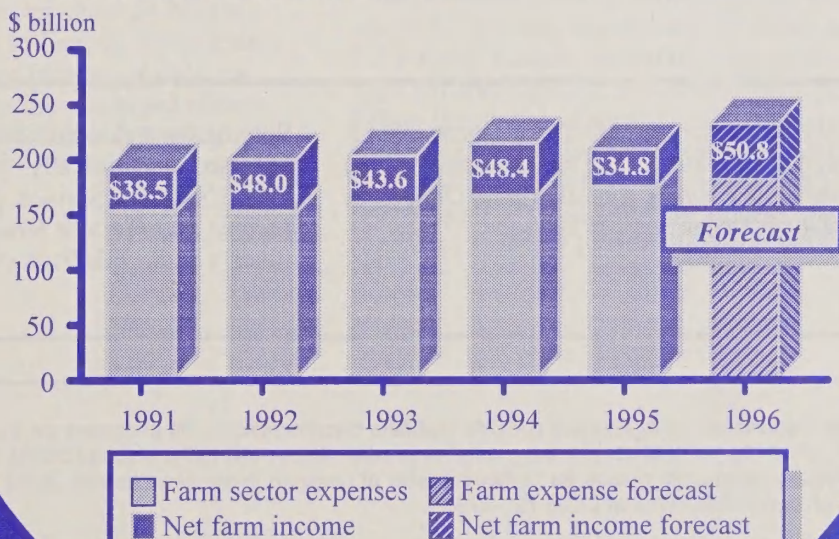
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Agricultural Income and Finance

Situation and Outlook Report

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Lower 1995 farm income reflects a smaller harvest and higher costs, while a larger crop and strong grain prices should increase 1996 income



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Summary

Farm Income Forecast for 1996 Above Previous 5-Year Average

The forecasts of net cash income of \$58 billion and net farm income of \$51 billion for 1996 represent substantial increases over 1995. Net cash income averaged \$53 billion between 1990 and 1995. Net farm income averaged \$43 billion. Crop receipts are forecast to be a record for 1996. Even though overall livestock receipts are forecast to increase compared with 1995, cattle receipts in 1996 could be the lowest in the 1990's.

Strong crop receipts are a major reason for the expected higher income. Tight worldwide grain supplies have kept grain prices relatively high while U.S. production of corn, wheat, and soybeans is expected to be larger than last year. At the same time vegetable, fruit, and greenhouse receipts should continue their steady growth. Overall, livestock are expected to be up, led by hog, poultry, and dairy producers. Financial problems may continue for beef producers.

Farm Asset Growth To Continue

The value of U.S. agricultural assets (excluding operator households) on December 31, 1996, is forecast at \$1,012 billion, up 4.2 percent from 1995. About three-quarters of the increase is due to rising real estate values.

Nonreal estate assets are expected to increase about \$9 billion in 1996. Livestock and poultry values in 1996 are expected to rise after falling by nearly \$13 billion in 1995. The value of crops stored and purchased inputs on hand are expected to rise in 1996 after dropping in 1995. The value of machinery and equipment is forecast to rise about \$2 billion, in part due to favorable credit conditions.

Farm Debt Expected To Rise Again in 1996

Total debt is projected to rise another \$3-\$4 billion in 1996. Total farm business debt rose by about \$4 billion during 1995, reaching nearly \$151 billion, its highest since 1986. The impact of this continuing increase in debt on farm incomes will be moderated by the combined effects of relatively high 1996 commodity prices and interest rates slightly lower than in 1995.

Final Estimates for 1995 Show Farm Income Down

Final 1995 farm income estimates confirm that even with record cash receipts, both net farm and net cash income were down from 1994. Net farm income in 1995 was nearly \$14 billion, or 28 percent, less than 1994. Net cash income was lower by \$1.7 billion, or 3 percent. Both income indicators were the lowest measured in the 1990's. The total value of 1995 crop sales was up almost \$6.3 billion over 1994, despite lower production levels for most major crops. Commodities produced in 1994 and sold in calendar year 1995 made possible much of the increased crop sales value. Partially offsetting increased crop sales was a \$1.3-billion decline in livestock receipts. Beef prices in 1995 were lower every month than in 1994. Increased expenses offset larger gross revenues in 1995. Major areas of increased expenses were feed, fertilizer, interest, and labor costs.

Grain Crop Returns Higher in 1995; Acreage Smaller

Costs and returns estimates show that higher 1995 prices led to higher returns for corn, grain sorghum, wheat, and rice, despite lower yields and higher expenses. Average barley returns above cash costs in 1995 were nearly double 1994. However, a decline in the value of soybean production, along with higher costs, caused returns above total economic costs to fall about \$2-\$4 per acre from 1994 to 1995. Peanut and cotton returns were also down for 1995, the result of lower yields. Acres planted to major crops in 1995 tended to decline from 1994, with the exception of durum wheat, soybeans, and cotton. Total U.S. planted acreage declined 1.7 percent. In response to favorable prices, cotton acreage has shown dramatic increases in the Southeast in recent years.

Crop prices received by farmers in 1995 were up an average of 6.7 percent, but average livestock prices were down 3.2 percent. Returns to market hogs increased as a result of more favorable prices. However, feeder pig prices did not follow the upturn in market hog prices, and returns to feeder pig production were down. As beef production increased and more beef moved through the market, cattle prices declined. Consequently, returns above total economic costs for beef producers declined in 1995.

Farm Income Down in 1995, Despite Record Cash Receipts

Farm marketings maintained in 1995 by drawing upon inventories from 1994's bumper harvest. Higher crop prices contributed to higher cash receipts, but production expenses also rose significantly.

Farm Income Down in 1995

Even though cash receipts reached a record high in 1995, both **net farm income** (which accounts for changes in inventories and capital replacement) and **net cash farm income** (which excludes these items) declined from 1994. Net farm income fell by \$13.6 billion, a 28-percent decline, while cash farm income was lower by \$1.7 billion, or 3.3 percent (table 2 and fig. 1). Both indicators of farm income were at the lowest measured in the 1990's. **Net value added** also declined in 1995, by \$12.5 billion (table 1 and fig. 2). Net value added, a more encompassing estimate of the farm sector's contribution to the economy, reflects the economic returns generated from production agriculture earned by farm employees, lenders, and landlords in addition to farm operators (defined as those individuals who share in the risk of production). Net value added and net farm income both measure only the income generated from the current year's production.

Farm marketings increased by \$5.0 billion in 1995. As in 1994, cash receipts derived from crop sales rose while livestock receipts continued to decline (fig. 3). The total value of 1995 crop sales was up almost \$6.3 billion from 1994, yet production levels were down for most major crops (fig. 4). Corn production, which typically represents close to one-fifth of crop sales value, was below average for the current decade and far below the previous year's excellent crop. Both area planted and corn yields in 1995 fell significantly short of 1994. With smaller yields in 1995, production of soybeans and wheat were also both down from 1994. Much of increased crop sales value was made possible by crops produced in 1994's bumper harvest and sold from inventories in calendar year 1995. Consequently, a \$3.4-billion reduction in the value of inventories offset a significant share of the additional crop sales in 1995. The remaining difference in crop sales value can be attributed to better prices received for major crops sold in 1995.

Countering the increased crop sales was a \$1.3-billion decline in livestock receipts, continuing a slide that began in 1994. Lowered value of beef sales accounted for the decline in livestock receipts. Monthly beef prices in 1995 were even lower than in the corresponding months for 1994. Although total beef production was 4 percent larger in 1995, the additional output was more than outweighed by declining prices. Higher earnings from farm-related activities such as custom machinery work and farm forestry, were partially offset by modestly lower Government payments (fig. 5).

Two key components of farm income, production and the value of inventories, reversed direction in 1995, compared with 1994. Although farm marketings were up \$5.0 billion in 1995, gross farm income was \$5.4 billion lower. The lower gross farm income is a reflection of the decline in production during calendar year 1995. In 1994's bumper crop year, farmers marketed \$180.8 billion of crops and livestock during the calendar year and added \$8.2 billion of farm products to their inventories. Together, farm marketings and increased inventories in 1994 represented \$189 billion in crop and livestock production for the year. In 1995, farmers marketed products valued at \$185.8 billion, but part of the additional cash sales were accomplished by withdrawing inventories valued at \$3.4 billion from earlier years' production. Thus, \$182.4 billion in crops and livestock were produced in 1995. The gross farm income generated by the Nation's farm sector during calendar year 1995, after all adjustments, was \$5.4 billion less than in 1994. When an \$8.1-billion rise in production expenses is added to the \$5.4-billion decline in gross farm income, net farm income declined substantially from 1994 to 1995 (fig. 6).

Net cash income in 1995 also declined from 1994, but not as dramatically as the fall in net farm income. Farmers retained stocks from 1994's bumper harvest, hoping to sell at better prices in the coming year. Crop prices were indeed higher for 1995. Thus, farmers were able to maintain or increase cash receipts for major crops in 1995 despite a mediocre production year. However, the 1995 increase in gross cash income of \$6.1 billion was not enough to offset \$7.8-billion in added cash expenses, causing the farm sector to have \$1.7 billion less in cash income in 1995 than in 1994.

The value added by the farm sector for 1995 reflects a decline similar to the farm income measures. Final output for crops and livestock declined \$4.7 billion and \$1.9 billion respectively, only partially offset by an \$1.8-billion increase in returns from services and forestry. At the same time, intermediate consumption outlays used in producing these goods and services increased \$4.8 billion. Falling final output and rising costs resulted in \$12.5 billion less to be distributed among the providers of resources to the farm sector. While employees and lenders received a bit more for their contribution to farm production in 1995, nonoperator landlords with share-rent contracts received somewhat less in rents. Overall, returns to nonoperator contributors were up \$1.1 billion. Farm operators, who typically benefit most from the increases and assimilate most of the declines, absorbed the burden of the reduced value added in 1995. The portion of value added received by farm operators declined \$13.6 billion.

Figure 1 -- Both net farm income and net cash income fell in 1995

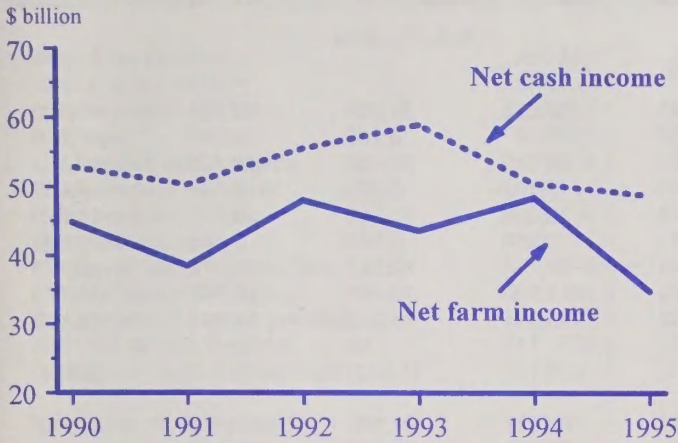


Figure 2 -- Value added by farm sector fell in '95, farm operators absorbed most of the decline

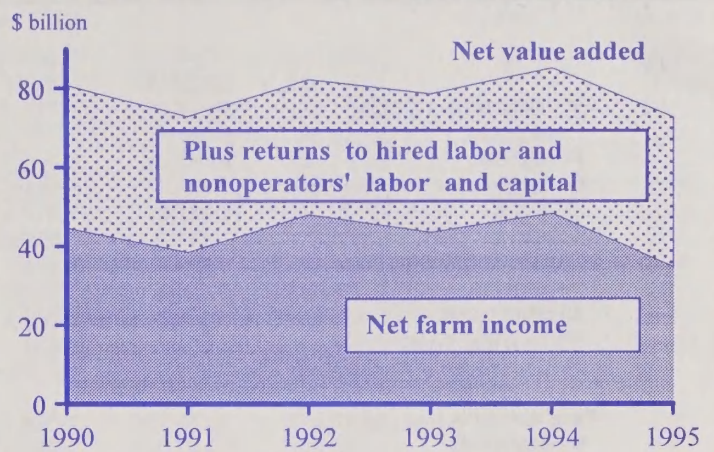


Figure 3 -- Cash receipts from crops continued upward, while livestock proceeds slid in 1995

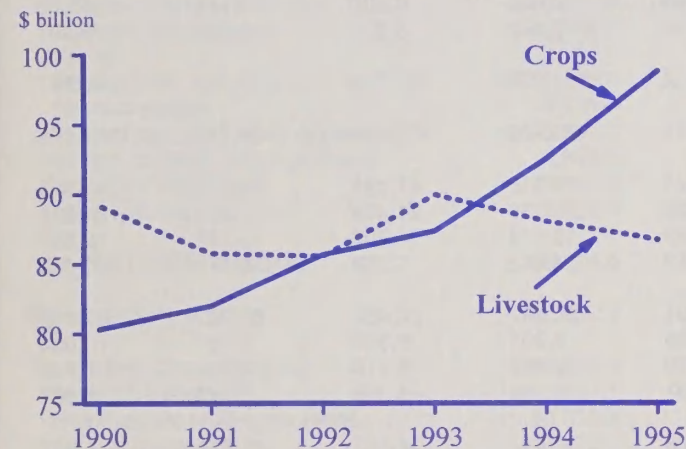


Figure 4 -- Corn and soybean production down in 1995 from 1994's bumper crops

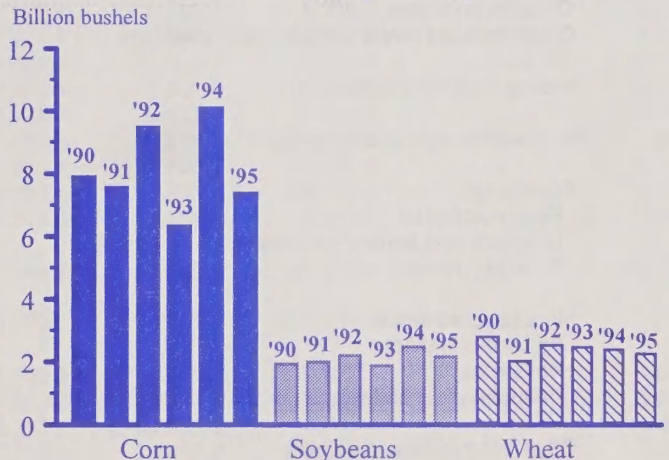


Figure 5 -- Sources of gross cash income; crops up, livestock and Government payments down

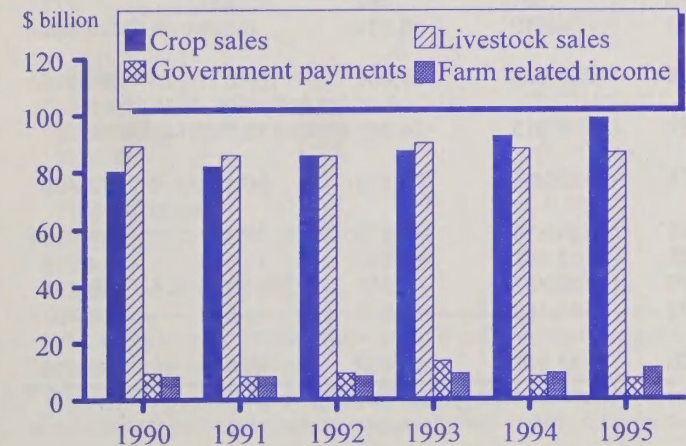


Figure 6 -- Production expenses grow, while gross and net farm income both lower in '95

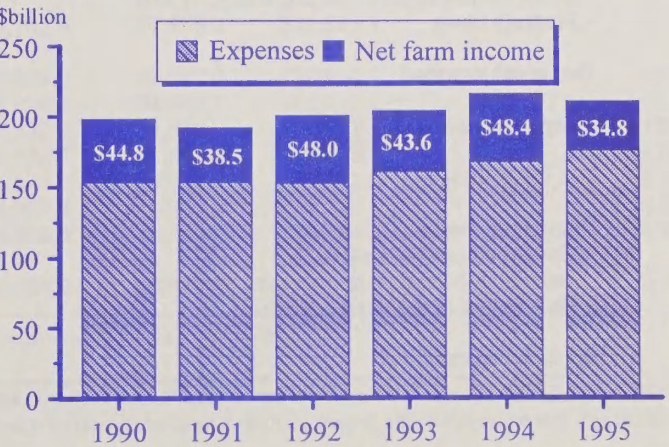


Table 1 -- United States: Value added to the national economy by the agricultural sector via the production of goods and services, 1991-95¹

Item		1991	1992	1993	1994	1995
<i>Million dollars</i>						
Final crop output (sales)		80,985	89,015	81,938	99,829	95,123
Food grains		7,325	8,467	8,180	9,545	10,069
Feed crops		19,327	20,060	20,162	20,296	23,144
Cotton		5,236	5,192	5,250	6,738	7,567
Oil crops		12,698	13,282	13,220	14,657	14,829
Tobacco		2,881	2,958	2,948	2,645	2,594
Fruits and tree nuts		9,923	10,174	10,281	10,176	10,775
Vegetables		11,625	11,896	13,466	13,740	14,773
All other crops		13,062	13,691	13,946	14,849	15,155
Home consumption		122	116	69	72	130
Value of inventory adjustment 2/		(1,214)	3,177	(5,582)	7,112	(3,914)
Final animal output (sales)		87,291	87,076	91,686	89,651	87,747
Meat animals		50,132	47,749	50,824	46,785	44,616
Dairy products		18,007	19,736	19,243	19,935	19,924
Poultry and eggs		15,154	15,523	17,325	18,443	19,121
Miscellaneous livestock		2,494	2,615	2,775	2,966	3,183
Home consumption		498	474	451	409	365
Value of inventory adjustment 2/		1,007	978	1,070	1,112	538
Services and forestry		15,376	15,308	17,154	18,481	20,278
Machine hire and customwork		1,718	1,548	1,962	2,348	2,173
Forest products sold		1,803	2,178	2,555	2,690	2,712
Other farm income		4,699	4,440	4,606	4,116	5,995
Gross imputed rental value of farm dwellings		7,156	7,142	8,030	9,327	9,397
Final agricultural sector output		183,652	191,398	190,778	207,961	203,147
less: Intermediate consumption outlays		94,541	93,409	100,449	104,749	111,165
Farm origin		38,571	38,616	41,198	41,250	42,548
Feed purchased		19,329	20,130	21,429	22,628	24,528
Livestock and poultry purchased		14,129	13,574	14,607	13,249	12,557
Seed purchased		5,113	4,912	5,162	5,373	5,463
Manufactured inputs		20,591	20,097	20,466	21,723	23,440
Fertilizers and lime		8,665	8,331	8,398	9,181	10,034
Pesticides		6,318	6,468	6,718	7,219	7,719
Petroleum fuel and oils		5,607	5,298	5,350	5,323	5,687
Other intermediate expenses		35,378	34,697	38,785	41,776	45,177
Repair and maintenance of capital items		8,632	8,471	9,158	9,185	9,427
Machine hire and customwork		3,515	3,799	4,403	4,790	4,792
Marketing, storage, and transportation expenses		4,719	4,541	5,648	6,708	7,182
Contract labor		1,572	1,717	1,771	1,805	1,969
Miscellaneous expenses		16,941	16,168	17,805	19,288	21,807
plus: Net government transactions		1,946	2,590	6,726	799	(110)
+ Direct Government payments		8,214	9,169	13,402	7,879	7,252
- Motor vehicle registration and licensing fees		348	361	362	421	471
- Property taxes		5,920	6,219	6,314	6,659	6,891
Gross value added		91,058	100,579	97,056	104,011	91,872
less: Capital consumption		18,187	18,313	18,388	18,780	19,107
Net value added		72,871	82,266	78,668	85,231	72,765
less: Factor payments		34,345	34,219	35,018	36,835	37,946
Employee compensation		12,325	12,287	13,230	13,503	14,316
Net rent received by nonoperator landlords		9,926	10,765	10,950	11,525	10,872
Real estate and non real estate		12,093	11,167	10,838	11,807	12,757
Net farm income		38,526	48,047	43,650	48,396	34,819

¹ Component statistics are drawn from the net farm income accounts and include income and expenses related to the farm operator dwellings. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development.

² A positive value of inventory change represents current-year production not sold by December 31. A negative value is an offset to production from prior years included in current-year sales.

Table 2 -- United States: Farm income indicators, 1991-95

Item	1991	1992	1993	1994	1995	Change 1994-95	
						Value	Percentage
Million dollars						\$ billion	Percent
Gross farm income	191,866.7	200,567.2	204,180.2	215,840.3	210,399.2	(5.4)	-2.5%
Gross cash income	184,298.4	188,680.0	200,142.9	197,808.2	203,883.1	6.1	3.1%
Farm marketings	167,863.7	171,345.5	177,617.3	180,775.0	185,750.0	5.0	2.8%
Crops	82,077.3	85,721.8	87,451.4	92,645.6	98,906.2	6.3	6.8%
Livestock and products	85,786.4	85,623.8	90,165.9	88,129.4	86,843.8	(1.3)	-1.5%
Government payments	8,214.4	9,168.9	13,402.0	7,879.1	7,252.3	(0.6)	-8.0%
Farm-related income	8,220.3	8,165.5	9,123.5	9,154.0	10,880.8	1.7	18.9%
Noncash income	7,775.4	7,731.7	8,549.2	9,808.1	9,892.0	0.1	0.9%
Value of home consumption	619.8	589.5	519.2	481.0	495.1	0.0	2.9%
Rental value of dwellings	7,155.6	7,142.2	8,030.0	9,327.1	9,396.9	0.1	0.7%
Operator and other dwellings ¹	6,615.8	6,651.6	7,600.6	8,892.8	8,834.3	(0.1)	-0.7%
Hired laborer dwellings	539.8	490.6	429.3	434.3	562.6	0.1	29.5%
Value of inventory adjustment	(207.1)	4,155.5	(4,511.9)	8,224.0	(3,375.9)		
Total production expenses	153,341.0	152,520.4	160,530.4	167,444.0	175,580.6	8.1	4.9%
Intermediate product expenses	93,316.1	92,052.5	99,039.7	103,364.7	109,667.3	6.3	6.1%
Farm origin	38,571.5	38,616.0	41,197.6	41,250.3	42,548.4	1.3	3.1%
Feed purchased	19,329.1	20,129.8	21,428.7	22,628.3	24,528.4	1.9	8.4%
Livestock and poultry purchased	14,129.1	13,573.9	14,606.8	13,249.5	12,557.4	(0.7)	-5.2%
Seed purchased	5,113.3	4,912.3	5,162.1	5,372.5	5,462.5	0.1	1.7%
Manufactured inputs	20,590.9	20,096.8	20,465.9	21,722.7	23,440.3	1.7	7.9%
Fertilizer and lime	8,665.5	8,330.8	8,397.9	9,180.8	10,034.3	0.9	9.3%
Pesticides	6,318.0	6,467.6	6,718.1	7,218.5	7,718.5	0.5	6.9%
Fuel and oil	5,607.5	5,298.4	5,349.8	5,323.3	5,687.4	0.4	6.8%
Other	34,153.7	33,339.8	37,376.3	40,391.8	43,678.6	3.3	8.1%
Repair and maintenance	8,631.6	8,470.9	9,157.9	9,185.1	9,426.6	0.2	2.6%
Other miscellaneous	25,522.2	24,868.9	28,218.4	31,206.7	34,252.0	3.0	9.8%
Interest	12,093.1	11,167.4	10,838.2	11,806.7	12,757.3	1.0	8.1%
Real estate	5,963.3	5,772.2	5,503.5	5,853.1	6,067.3	0.2	3.7%
Nonreal estate	6,129.8	5,395.3	5,334.7	5,953.6	6,690.0	0.7	12.4%
Contract and hired labor expenses	13,897.5	14,004.7	15,000.9	15,308.1	16,285.1	1.0	6.4%
Net rent to nonoperator landlords ²	9,926.5	10,764.5	10,949.7	11,525.4	10,872.5	(0.7)	-5.7%
Capital consumption	18,187.3	18,312.5	18,387.8	18,780.4	19,107.2	0.3	1.7%
Property taxes	5,920.5	6,218.7	6,314.0	6,658.8	6,891.2	0.2	3.5%
NET FARM INCOME ³	38,525.6	48,046.8	43,649.8	48,396.3	34,818.6	(13.6)	-28.1%
Gross receipts of farms	185,250.9	193,915.6	196,579.5	206,947.5	201,564.9	(5.4)	-2.6%
Farm production expenses	149,532.8	148,413.9	156,452.8	162,816.4	170,815.7	8.0	4.9%
Nonfactor payments	115,567.7	114,585.4	121,823.5	126,397.1	133,300.8	6.9	5.5%
Intermediate product expenses	92,338.3	91,182.7	98,252.2	102,315.0	108,761.4	6.4	6.3%
Capital consumption	16,332.1	16,105.7	16,174.5	16,411.2	16,540.3	0.1	0.8%
Property taxes	5,325.2	5,579.6	5,625.9	5,865.5	6,030.1	0.2	2.8%
Contract labor	1,572.1	1,717.4	1,771.0	1,805.4	1,969.1	0.2	9.1%
Factor payments	33,965.2	33,828.5	34,629.3	36,419.3	37,514.9	1.1	3.0%
Interest	11,713.3	10,776.7	10,449.6	11,391.3	12,326.4	0.9	8.2%
Hired labor compensation	12,325.5	12,287.2	13,230.0	13,502.6	14,316.1	0.8	6.0%
Net rent to nonoperator landlords	9,926.5	10,764.5	10,949.7	11,525.4	10,872.5	(0.7)	-5.7%
RETURNS TO OPERATORS ⁴	35,718.1	45,501.7	40,126.8	44,131.1	30,749.2	(13.4)	-30.3%
Gross cash income	184,298.4	188,680.0	200,142.9	197,808.2	203,883.1	6.1	3.1%
Cash expenses	134,039.1	133,190.3	141,204.2	147,357.0	155,120.7	7.8	5.3%
Cash expenses, excluding net rent	122,734.5	121,053.0	128,899.3	134,445.5	142,840.4	8.4	6.2%
Intermediate product expenses	92,338.3	91,182.7	98,252.2	102,315.0	108,761.4	6.4	6.3%
Interest	11,713.3	10,776.7	10,449.6	11,391.3	12,326.4	0.9	8.2%
Cash labor expenses	13,357.7	13,514.0	14,571.6	14,873.8	15,722.5	0.8	5.7%
Property taxes	5,325.2	5,579.6	5,625.9	5,865.5	6,030.1	0.2	2.8%
Net rent to nonoperator landlords ⁵	11,304.6	12,137.3	12,305.0	12,911.5	12,280.3	(0.6)	-4.9%
NET CASH INCOME	50,259.3	55,489.7	58,938.6	50,451.2	48,762.4	(1.7)	-3.3%

¹ Value added to gross income. Value added to net farm income equals difference in net farm income and returns to operators

² Includes capital consumption.

³ Statistics in and above the net farm income line represent the farm sector, defined as including farm operator's dwellings located on farms. Statistics below net farm income line represent only the farm business to the exclusion of farmer dwellings.

⁴ Returns to operators is equivalent to net farm income excluding the income and expenses associated with farm dwellings.

⁵ Excludes landlord capital consumption.

Corn, Wheat, Soybeans, and Cotton Account for Almost Three-Fourths of Increased Crop Receipts

Cash receipts for corn, which leads all other crops in total value marketed, were \$17.4 billion in 1995, up from \$14.7 billion in 1994. A slightly larger quantity of corn was marketed in 1995 than in 1994. Yet, the 7.3-billion bushel corn crop produced in 1995 was 27 percent below 1994's record crop of 10.1 billion bushels. A drawdown on the large unsold inventories held over from 1994's record crop permitted farmers to maintain sales quantities. Rising prices throughout the year, continuing into the post-harvest period, boosted corn revenues (fig. 7). The smaller crop and strong demand for corn, especially exports, bolstered corn prices. (Average annual corn output during 1985-94 was 7.8 billion bushels.)

Over half of calendar 1995 corn sales took place in the later half of the year when prices were highest. Prices during October, November, and December 1995, when a third of the year's corn sales occurred, averaged \$0.85 per bushel (or 42 percent) more than the same months in 1994. By contrast, prices were their lowest in the final 3 months of 1994 when over half of 1994 corn sales took place. The net result was a \$2.7-billion increase in 1995 sales value over 1994. The increased 1995 cash sales, however, were more than offset by a \$3.0-billion decrease in the value of corn inventories.

Wheat receipts were up \$910 million in 1995, accounting for about 15 percent of the overall increase in crop receipts. Harvested acreage was down slightly for 1995, and average yield was down 4.8 percent, the lowest since 1991. Both 1995 production and sales were down slightly from 1994, but 1995 prices were considerably higher (fig. 8). From July through December, when 60 percent of the crop was marketed, 1995 prices averaged over \$1 per bushel more than for the same months in 1994. Unlike corn and soybeans, wheat production in 1994 was not exceptional, and a large inventory of the unsold 1994 crop was not available to sell at 1995's higher prices.

Soybean receipts increased by \$376 million, equivalent to 6.0 percent of the net increase in crop revenues. Slightly more soybeans were marketed in 1995 than in 1994. Area planted to soybeans was up in 1995, in contrast to decreased corn acreage, and production was high, but not nearly equaling 1994's record crop. In fact, 1995 market offerings exceeded production, thanks to the carryover of unsold beans from the previous year's harvest. Even though the average of monthly prices for 1995 was not as high as for 1994, the immediate post-harvest prices for 1995 were significantly higher than the year before (fig. 9). Prices during September-December of 1995 averaged \$0.92 (or 17 percent) higher than for these same months in 1994. Since about 50 percent of soybean sales for both years occurred during September-December, the higher 1995 prices for these months translated into expanded revenues from 1994. At year's end, however, the withdrawal from soybean inventories valued at \$582 million, more than exceeded the increased receipts generated from higher prices.

Cotton sales for 1995 were up by \$860 million, equivalent to 14.1 percent of the total increase in the value of crop sales. The quantity of cotton sold in 1995 nearly equaled 1994 sales, exceeding annual production. Total output in 1995 was 8.6 percent less than in 1994, so the level of cotton sales was also maintained by selling from inventories carried over from the prior year. In the case of cotton, however, a reduction of inventories valued at \$114 million was not nearly enough to offset increased crop revenues. Higher prices, more than sales of inventories, account for the increase in cotton receipts. The largest share of cotton was marketed during the final months of the calendar year, October-December, representing 67 percent of 1995 sales and 71 percent of 1994 sales. Prices during these 3 months averaged 9 percent higher in 1995 than in 1994 (fig. 10). The annual (unweighted) average price was 17 percent higher in 1995. Consequently, producers benefited from higher prices in the early months of 1995 as well.

Vegetables Are Major Contributor To Higher Crop Receipts

A small decline in vegetable yields, due to unfavorable weather in some growing areas, and a slightly lower harvested acreage (a little under a percentage point) caused 1995 vegetable marketings to dip from the 1994 level. Continued strong demand boosted vegetable prices, with growers' cash receipts climbing by more than 7.5 percent from 1994. In fact, the increased value of vegetable cash receipts in 1995 was equivalent to 16 percent of the overall increase in crop revenues from 1994.

In 1995, almost \$8 out of each \$100 of cash receipts in agricultural commodity sales came from vegetables, up 40 cents from 1994. Among the large number of vegetables produced in the United States, potatoes and lettuce account for the largest share of cash receipts. Potatoes accounted for \$1.40 (18 percent) of the \$8.00 in vegetable cash receipts, while lettuce, which surpassed tomatoes in value of marketings, accounted for a little over a \$1 (13 percent). Florida's fresh tomato growers experienced a decline in their marketings because excessive rain in late fall delayed their harvest, and Mexican growers responded by exporting tomatoes earlier to the United States.

Better than 47 percent of U.S. cash receipts from vegetables come from California and Florida. Cash receipts from vegetables represent about 35 percent of California's cash receipts from all crops and 27 percent of Florida's. Cash receipts from potatoes enable Washington and Idaho to follow Florida in importance as vegetable producing States. And for Idaho, cash receipts from potatoes constitute better than 22 percent of its total for all commodities.

Lettuce growers in 1995 brought 11 percent less product to the market than in 1994. Lower marketings, with continued strong demand, caused prices to rise by nearly 75 percent, and cash receipts from lettuce rose by more than 50 percent. These higher cash receipts enabled Arizona to move from ninth place in vegetable cash receipts in 1994 to fifth in 1995.

Cattle Receipts Down Again in 1995

In 1995, livestock receipts were \$1.3 billion less than in 1994, which was \$2.0 billion under 1993. The predominant influence on the value of livestock sales was the fall in receipts from cattle and calves. For the second year in a row cattle and calf receipts registered more than \$2.5 billion in annual declines. Prices for cattle and calves, compared with the same months of 1994, were lower throughout 1995 (fig. 11). Despite these falling prices, beef production continued to edge upward in 1995 (fig. 12). Ending year inventories for 1995 were above 1994, suggesting that the beef production cycle was still on an upswing. Declining pork revenues were also a major component of falling livestock receipts in 1994, but more favorable prices for pork in 1995 contributed to a modest gain in hog receipts in 1995. Even so, hog receipts were still almost \$1.0 billion below those registered in 1993. Dairy receipts were nearly unchanged in 1995. Continuing steady gains in broiler revenues helped prevent even larger declines in total livestock receipts.

Production Expenses Rise in 1995 For Third Straight Year

Production expenses in 1995 were \$175.6 billion, up \$8.1 billion (4.9 percent) from 1994. After remaining nearly level at around \$153 billion from 1990 through 1992, production expenses have risen more than 4 percent in each of the last 3 years (fig. 6). The total increase since 1992 has been \$23.1 billion (15.2 percent). The increase in 1995 was more than the 4.3 percent growth between 1993 and 1994. The pattern of changes in 1995 expenses is more varied than those that occurred in 1993 and 1994 and appear tied more to specific circumstances than to generalized expansion.

Feed Expenditures Follow Ups and Downs In Feed Grain Prices

Estimated expenditures for feed were \$24.5 billion in 1995, up \$1.9 billion (8.4 percent) from 1994. This was the fourth straight year that feed expenses rose significantly, and the third straight year that feed posted the largest increase among production expenses. This pattern is likely due to shifts in the structure and location of animal production. A larger proportion of animals are being raised on large, specialized operations that buy most of their feed. More dairy production, for example, is occurring in the Southwest and Mountain States where raising feedstuffs other than hay on the farm may be uneconomical.

Due to large feed grain and soybean harvests in 1994, feed prices were relatively low during the last quarter of 1994 and the first half of 1995. Lower costs encouraged livestock, dairy, and poultry producers to expand further already relatively high inventory and production levels. Total beef production increased around 3 percent over the year, and the January 1, 1996 cattle and calf inventory was up. Cattle on feed were up 3 percent overall and 10 percent in feedlots with 1,000 head and greater capacity. Total poultry production rose around 4 percent; the total number of eggs increased slightly. Although hog producers cut production during the first half of 1995 due to low returns during 1994, they too began modest herd rebuilding during the summer. As a result, the December 1 hog breeding inven-

tory was slightly larger in 1995 than in 1994. Having committed themselves to higher production levels, these producers found it necessary to continue purchasing relatively large amounts of feed even though feed prices began to soar during the last quarter of the year.

The increase in the value of feed used in the last quarter, the product of the poor 1995 harvest and continued high demand for feed, more than offset the gain from less expensive feed during the earlier part of the year. The pattern of corn used as feed, which constitutes roughly 65 percent of all feedstuffs, is illustrative. The total value of corn used as feed, seed, and residual rose 13.2 percent in 1995. The total value of all grains used as feed, seed, and residual rose 8.2 percent.

Purchased Livestock and Poultry Expense Falls With Lower Feeder Cattle Prices

Total livestock and poultry purchases fell nearly \$700 million (5.2 percent) to \$12.6 billion in 1995. The value of interstate sales of cattle and calves, which constitutes 80 percent of the total, fell around \$900 million (8.4 percent).¹ Interstate sales of cattle and calves had already fallen \$1.4 billion (11.6 percent) in 1994. Both total liveweight and average value per cwt were down in 1994. In 1995, in line with the increases in cattle production and inventories, total liveweight rose 6 percent. However, the average value fell 14 percent, pressured by continued low prices for beef and the rise in feed grain prices in the second half of 1995.

All other categories of livestock and poultry rose in 1995. The value of hog and pig inshipments increased 21 percent in response to higher demand from hog producers during the last half of the year. Total chick and poult purchases rose 7 percent.

Fertilizer Expenses Pushed Up By Higher Nutrient Prices

Estimated fertilizer and soil conditioner expenditures were \$10.0 billion in 1995, up 9.3 percent from 1994. Significantly lower acreage and crop production reduced fertilizer quantities for the first 6 months of 1995 by 3.9 percent, as tabulated by the Association of American Plant Food Control. However, prices of fertilizer nutrients, particularly nitrogen, rose so much that expenditures increased.

The National Agricultural Statistics Service's (NASS) Prices Paid Index (PPI) for fertilizer rose 15 percent over the year and was up 21 percent from the previous year in April 1995. Estimates of the cost of primary nutrients used in making fertilizer showed nitrogen prices rising 25 percent over the year and 30 percent comparing the first 6 months of 1994 and 1995. The cost of phosphorus and potash also rose. Because nitrogen comprises more than half of the quantity of primary nutrients applied, the rise in its cost drove the composite index.

¹ Interfarm sales of cattle and calves within the same State are counted as neither receipts nor expenses.

Figure 7 --Corn prices rose throughout 1995 due to smaller harvest and strong export demand

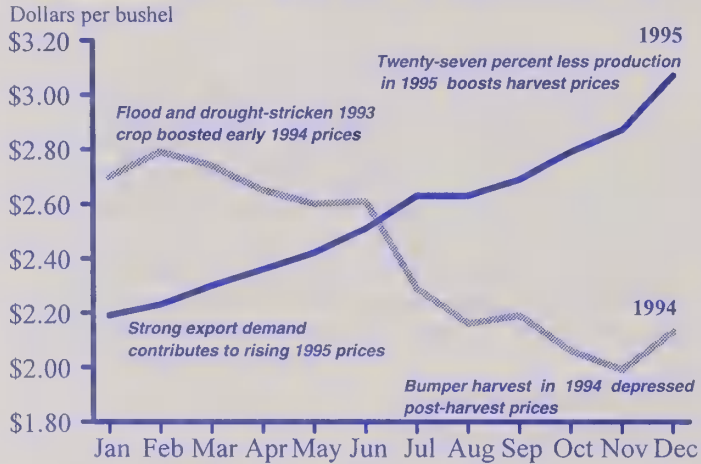


Figure 8 -- Wheat prices rose in 1995

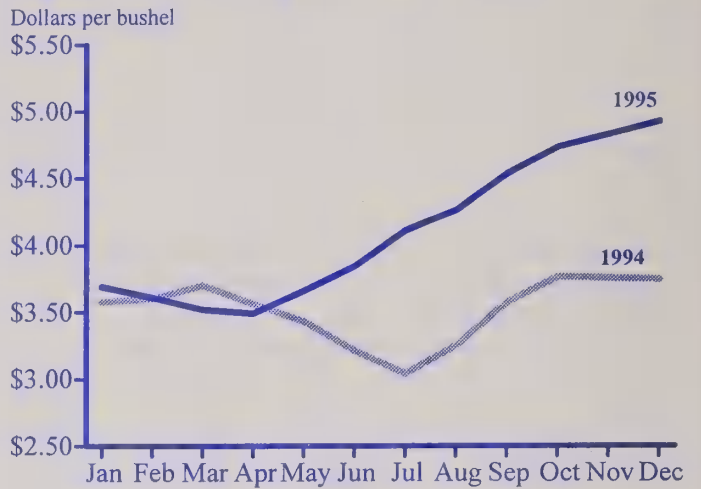


Figure 9 -- Soybean prices rose in 1995 due to strong demand and a small decline in harvest

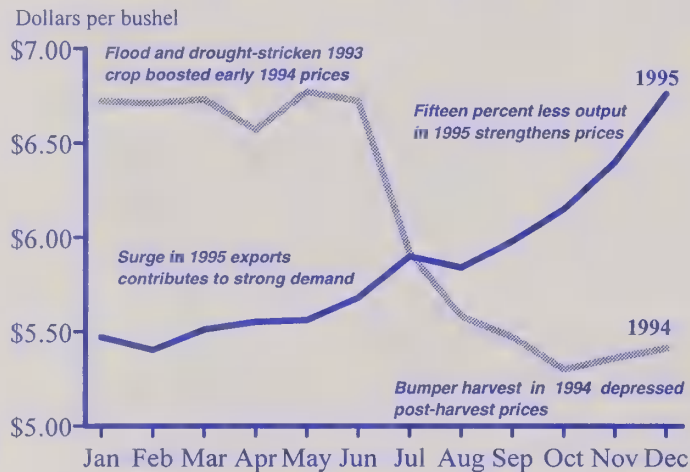


Figure 10 -- Cotton prices in 1995 fell by mid-year, but were higher than 1994 in every month

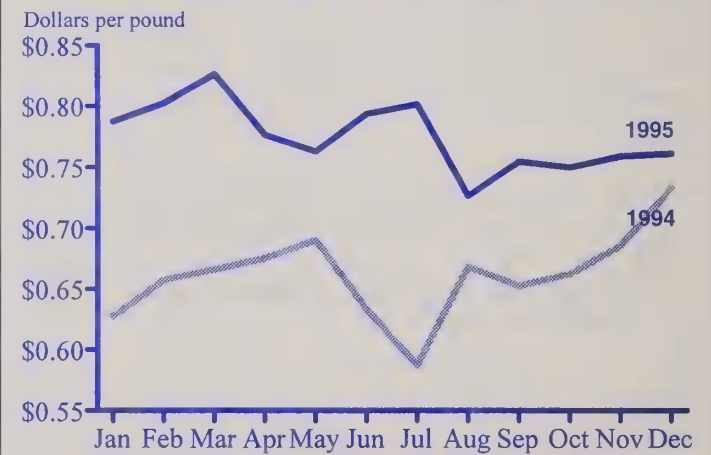


Figure 11-- Beef prices lower each month in 1995 than in the same month for previous years

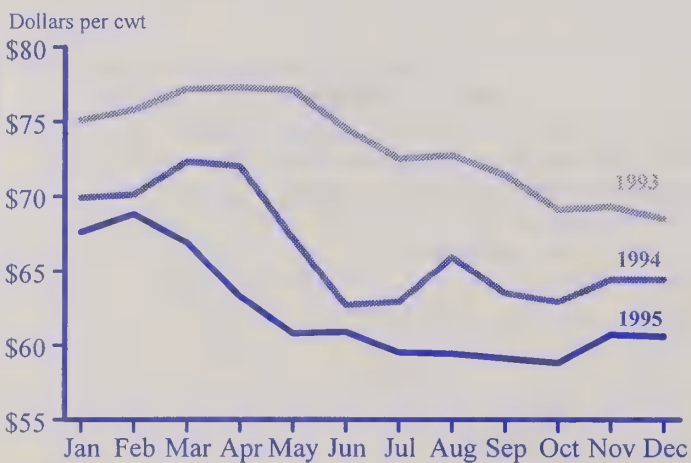


Figure 12 -- Beef production continued to rise, while pork production remained stable in 1995

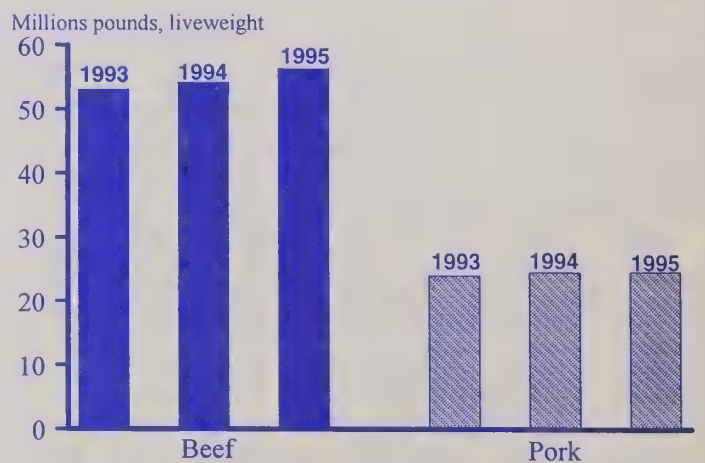


Table 3--United States: Leading commodities for cash receipts, 1995

Rank	Items	Value of receipts 1,000 dollars	Percent of total receipts -----Percent-----	Cumulative percent ¹
	All commodities	185,750,021	100.0	--
	Livestock and products	86,843,791	46.7	--
	Crops	98,906,230	53.2	--
1	Cattle and calves	33,983,198	18.3	18.3
2	Dairy products	19,923,558	10.7	29.0
3	Corn	17,400,921	9.3	38.3
4	Soybean	13,203,038	7.1	45.5
5	Broilers	11,760,787	6.3	51.8
6	Greenhouse and nursery	10,407,898	5.6	57.4
7	Hogs	10,073,641	5.4	62.8
8	Wheat	8,769,169	4.7	67.5
9	Cotton	7,566,839	4.0	71.6
10	Chicken eggs	3,958,976	2.1	73.7
11	Hay	3,617,333	1.9	75.7
12	Turkeys	2,774,302	1.4	77.2
13	Tobacco	2,594,363	1.4	78.6
14	Potatoes	2,594,306	1.4	80.0
15	Grapes	2,022,189	1.0	81.1
16	Lettuce	1,915,213	1.0	82.1
17	Oranges	1,605,227	0.8	83.0
18	Apples	1,601,732	0.8	83.8
19	Tomatoes	1,577,065	0.8	84.7
20	Rice	1,280,594	0.6	85.4
21	Sorghum grain	1,221,962	0.6	86.0
22	Sugar beets	1,083,757	0.5	86.6
23	Peanuts	1,013,822	0.5	87.1
24	Cane for sugar	886,828	0.4	87.6
25	Almonds	857,771	0.4	88.1
	Government payments ²	7252270	--	--

-- = Not applicable.

Numbers may not add due to rounding.

¹ The cumulative percentage is the sum of the percent of total receipts for each commodity and all preceding commodities.

² Government payments made directly to farmers in cash or Payment-in-kind.

Agricultural Chemical Expenses Continued To Rise Despite Fall in Crop Production

Estimated expenditures for agricultural chemicals rose \$500 million (6.9 percent) to \$7.7 billion. Despite the drop in crop production, estimates of the volume of active ingredients in conventional pesticides used by agriculture (prepared by the Environmental Protection Agency's (EPA) Office of Pesticide Programs based on proprietary data) rose 1.4 percent, to 966 million pounds. Estimated herbicide use fell 5 percent, in line with reduced corn acreage. Estimated insecticide use, though, rose 16 percent during 1995, following an estimated 27-percent increase during 1994, in response to "severe pest outbreaks" brought on by rain and other unusual weather patterns. Estimated use of fungicides increased marginally after increasing substantially between 1993 and 1994. Continued problems with potato blight were the principal reason for expanded fungicide application.

Overall, NASS' annual average Prices Paid Index for agricultural chemicals rose 5.3 percent during 1995. Coupling EPA's estimate of increases in agricultural chemical use with the rise in the PPI would indicate a percentage increase nearly equivalent to the 6.9-percent rise in expenditures estimated in farm income accounts.

When the diminished size of the 1995 harvest became known, farm operators, anticipating significantly higher acreage of major field crops in 1996 and having greater-than-anticipated cash receipts from rising grain prices, may have begun purchasing supplies of chemicals, expecting prices to rise as spring 1996 planting time approached. And, in fact, after reaching a low point in September 1995, NASS' PPI for chemicals rose 2 percent through April 1996.

Another factor that may be contributing to increases in agricultural chemical expenses is increased custom application. Federal and State laws now require licensed applicators for many more chemicals. Furthermore, farm operators are becoming increasingly wary of applying many chemicals themselves.

More Hours Worked and Increased Wages Contributed to Higher Labor Expenses

Total labor expenses were \$16.3 billion (up 6.4 percent from 1994), with hired labor at \$14.3 billion (up 6.0 percent) and contract labor at \$2.0 billion (up 9.1 percent). The 1995 increase was more than the 2.1-percent increase in 1994 but less than the 8.5-percent increase in 1993. Both average wage rates and estimated hours worked increased in 1995. However, the 1.8-percent rise in NASS' Wage Rates Index was smaller than the nearly 3-percent increases in both 1993 and 1994. Conversely, the Farm Labor Survey (FLS) April/July/October number of hours worked during the survey week rose 4.8 percent, while this number dropped in 1994 and rose only modestly in 1993. The changes in the Wage Rate Index and the number of hours worked would point to an increase of around 7 percent in hired labor expenses for 1995.

Cash receipts for vegetables, fruits, and nuts, the principal crops where contract labor is employed, rose 6.8 percent. Citrus fruit production was up nearly 10 percent. The FLS

national number of agricultural service workers (workers hired on a contract basis) in the four survey weeks was nearly the same as in 1994, but their FLS weighted average wage rates in California, which accounts for about a third of all agricultural service workers, rose around 6 percent.

Interest Expenses Jump Again

Total interest expenses were \$12.8 billion in 1995, up 8.1 percent from 1994. Interest on nonreal estate debt was \$6.7 billion, up 12.4 percent from 1994, and interest on real estate debt was \$6.1 billion, up 3.7 percent from 1994. The \$951-million increase in interest expenses was nearly identical to the \$968-million increase in 1994.

Although nonreal estate debt, excluding Commodity Credit Corporation (CCC) loans, increased \$2.5 billion (3.6 percent) in 1995, a rise of 0.6-percent (to 7.2 percent) in the average interest rate accounted for around three-fifths of the increase in nonreal estate interest. The opposite was the case with real estate interest, where an increase in debt of \$1.5 billion (2.0 percent) accounted for almost all of the increase, as average real estate interest rates were flat. Repayment of CCC loans, which are considered nonreal estate debt, was particularly heavy in 1995. Operators paid \$232 million in interest, up 178 percent, as they repaid \$8.2 billion in loans, up 84 percent from 1994. This represents the heaviest retirement of CCC-loan debt since 1987 and 1988.

Other Intermediate Product Expenses Vary

Expenses for petroleum fuel and oils was \$5.7 billion in 1995, up 6.8 percent from 1994. All other intermediate product expenses totaled \$43.7 billion, an 8-percent increase overall from 1994. However, the changes in components varied greatly.

Repair and maintenance expenses, including operator dwellings, were up 2.6 percent. However, repair and maintenance of farm business assets only increased 4.7 percent, led by a nearly 6-percent rise in motor vehicle and machinery repair and maintenance. At \$4.8 billion, machine hire and custom-work changed less than \$2 million as a 24-percent increase in machinery and equipment leasing was offset by decreases in crop-related custom work. Marketing, storage, and transportation expenses rose around 7 percent, a much smaller increase than in each of the 2 preceding years. The increase would have been even less had price increases for packaging and containers in the general economy not pushed estimated purchases of marketing containers up more than 17 percent.

Other significant increases in miscellaneous expenses were outlays for general management expenses (13 percent), utilities (9 percent), and tools and shop equipment purchases (5 percent). Insurance premiums increased less than 1 percent. The only significant decrease was in livestock services and supplies expenditures, which were down 4 percent.

Property Taxes Continue Slow Rise

Property taxes paid continued their pattern of slow, steady growth in 1995, increasing 3.5 percent to \$6.9 billion. Real estate tax payments were estimated up 4.2 percent to \$6.2

billion. After three year-to-year declines in the period between 1978 and 1984, property tax payments have risen every year except 1991. Taxes do not respond immediately to changes in the value of real and other property because rates are set by legislation, and reassessments of property values are periodic. However, the steady rise in tax payments corresponds to the overall increase in the real estate values and reflects the capacity of operators to pay assessed taxes in a timely manner.

Net Rent to Nonoperator Landowners Follows Decrease in Crop Production

Net rent to nonoperator landowners was \$10.9 billion, down 5.7 percent from 1994 due to a drop in share rents that corresponds with the sector's lower annual value of production. Total landlord gross income, excluding forest products, was \$17.1 billion, down 3 percent. Cash rent rose 6 percent to \$7.5 billion. However, share rent (\$8.9 billion) was down 16 percent and direct Government payments received by landlords (\$1.3 billion) fell 11 percent. Expenses paid by all landlords, including capital consumption, were \$6.8 billion, nearly unchanged. Nonoperator landlords netted \$9.2 billion, down 4 percent. Forest product receipts credited to nonoperator landowners added \$1.7 billion.

Capital Consumption Up Slightly

Total capital consumption, including operator dwellings, was estimated at \$19.7 billion, up 1.7 percent from 1994.

However, operator dwelling capital consumption rose more than 8 percent due to a 9.4-percent rise in operator dwelling values. Capital consumption for farm business capital items only was \$16.5 billion, up less than 1 percent. Capital consumption of service buildings has decreased steadily since 1981 as nominal investment has fallen to around one-third of its 1979 peak. Tractor capital consumption has risen each year since 1988 except for 1992, but at a slower rate over the last 3 years. The overall increase is due to both the climb in the average prices of tractors, which elevates their replacement value, and increased investment. Capital consumption of other machinery and equipment declined slightly for the first time since 1992. Investment in machinery and equipment has been nearly level since 1991, after large increases in 1989 and 1990, as farmers show a greater inclination to lease these items rather than purchase them.

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Farm Sector Income by Farm Size Classes

Most farms in the United States are small, but the largest share of farm production comes from bigger farms.

The net cash income accounts for the U.S. farm sector by farm size classes for 1995 and 1994 are presented in tables 4a and 4b. These income statements include cash receipts and cash expenses for farm operations, and are thus income statements of all participants who share in the risks of production, which include not only managing farm operators but partners, contractors, and shareholders. This is more inclusive than a farm income statement for the managing or primary operator. As a consequence, dividing a net cash income in the tables by the number of farms will give an estimate of an average farm operation's contribution to the Nation's net cash income, like the estimates presented in the appendix table 11 by States, but should not be construed to represent an income account for people who live on farms.

USDA's annual Farm Costs and Returns Survey (FCRS) is used to partition the national estimates. Observations in the FCRS are weighted to agree with USDA's estimates of farm numbers. Seven size classes are based on the farmers' estimates of annual sales. Sales include current year production sold in the current year, plus the marketing of crops produced in prior calendar years, and sold from inventories.

Most Farms Are Small

The number of farms increased slightly to 2,071,520 in 1995, and the percent of farms in each major size class remained relatively constant. Most farms are small. Almost 71 percent of all farms have annual sales of less than \$40,000, while less than 1 percent of all farms have sales greater than \$1 million.

Farms with over \$250,000 in sales account for less than 6 percent of all farms but dominate American agricultural output. These large farms sell over 62 percent of the Nation's livestock and over 53 percent of the crops. They have 56 percent of the gross cash income compared with

53 percent of the cash expenses. Around 70 percent of the livestock purchases, 60 percent of feed expenses, 74 percent of hired labor expenses, and 50 percent of the machine hire and custom work expenses were paid by these farms. They earn over 64 percent of the Nation's net cash income. Less than one-third of the direct Government payments went to these farms.

Farm with sales above \$1 million and small farms with less than \$20,000 in annual sales appeared to have fared best among size groupings in 1995. Total cash receipts and per farm estimates of cash receipts increased from 1994 to 1995 for these two outside groups. Farms between the two end groups faced declines in total and per farm cash receipts. Cash expenses showed no clear pattern of change by groups from 1994 to 1995. The farms among the largest and smallest sales groups appeared to have achieved gains in net cash income from 1994 to 1995, while those in other sales categories experienced declines.

Pacific Region Has the Most Large Farms

Farm size distribution varied across the Nation. In the Pacific region almost 4 percent of the farms had over \$1 million in sales. This was over three times the percentage in the Mountain region, which had the second highest percentage of large farms. The Northern Plains, Corn Belt, and Lake States were dominated by mid-sized farms. Farms with less than \$40,000 in sales accounted for more than 80 percent of the farms in the Appalachia, Southern Plains, Southeast, and Delta regions. Texas had the largest number of small farms in 1995, with over 152,000 farms reporting sales of less than \$20,000. At the same time, California with over 3,000, had the largest number of farms with over \$1 million in sales.

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Figure 13 -- Number and share of farms in each sales class, 1995

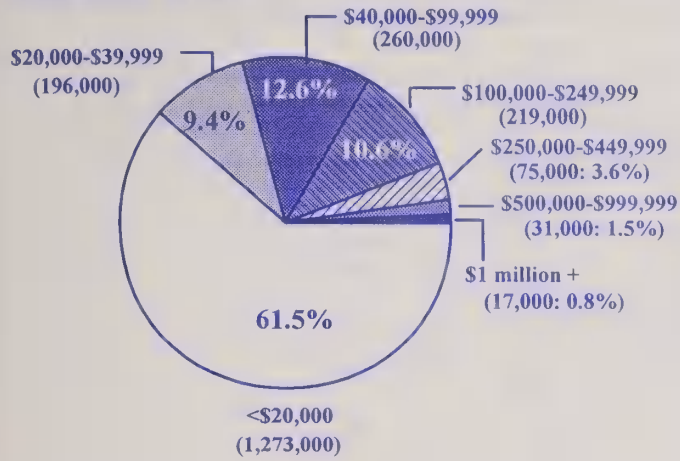


Figure 14 -- Share of total marketings from each farm sales class, 1995

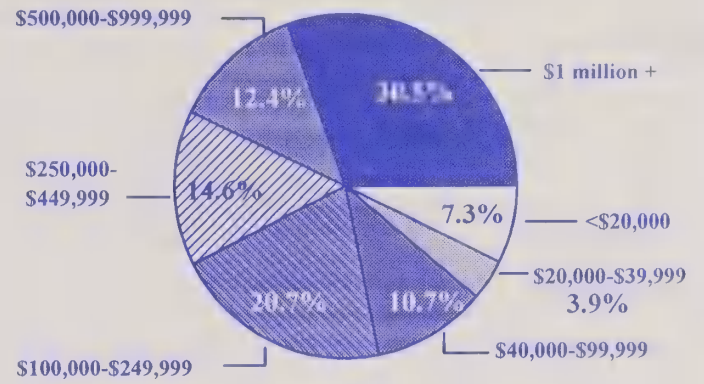


Figure 15 -- Share of Government payments received by each farm by sales class, 1995

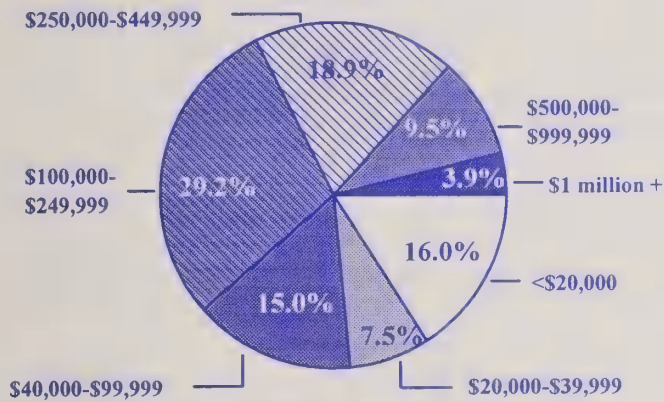


Table 4a --Number of farms and net cash income by value of sales class, 1995¹

	\$1,000,000 and over	\$500,000 to \$999,999	\$250,000 to \$499,999	\$100,000 to \$249,999	\$40,000 to \$99,999	\$20,000 to \$39,999	Less than \$20,000
Number of farms	17	30	75	219	260	196	1,273
	Thousands						
	Million dollars						
Gross cash income	58,871	25,135	30,010	42,884	22,382	8,298	16,303
Cash receipts from marketings	56,582	23,058	27,057	38,383	19,923	7,175	13,571
Crops	23,880	12,880	15,941	20,798	11,118	4,427	9,863
Livestock	32,702	10,178	11,117	17,584	8,805	2,749	3,708
Government payments	283	686	1,372	2,115	1,089	547	1,159
Farm-related income	2,005	1,391	1,580	2,386	1,369	575	1,573
Cash expenses	41,764	18,223	23,012	32,960	17,530	6,760	14,872
Net cash income	17,107	6,913	6,998	9,925	4,852	1,538	1,431
Percent of total:	Percent						
Number of farms	0.8	1.5	3.6	10.6	12.6	9.4	61.5
Gross cash income	28.9	12.3	14.7	21.0	11.0	4.1	8.0
Cash receipts from marketings	30.5	12.4	14.6	20.7	10.7	3.9	7.3
Crops	24.1	13.0	16.1	21.0	11.2	4.5	10.0
Livestock	37.7	11.7	12.8	20.2	10.1	3.2	4.3
Government payments	3.9	9.5	18.9	29.2	15.0	7.5	16.0
Farm-related income	18.4	12.8	14.5	21.9	12.6	5.3	14.5
Cash expenses	26.9	11.7	14.8	21.2	11.3	4.4	9.6
Net cash income	35.1	14.2	14.4	20.4	9.9	3.2	2.9

Table 4b --Number of farms and net cash income by value of sales class, 1994¹

	\$1,000,000 and over	\$500,000 to \$999,999	\$250,000 to \$499,999	\$100,000 to \$249,999	\$40,000 to \$99,999	\$20,000 to \$39,999	Less than \$20,000
Number of farms	17	31	74	224	272	200	1,246
	Thousands						
	Million						
Gross cash income	44,921	28,794	31,513	45,920	25,713	9,363	11,584
Cash receipts from marketings	42,846	26,833	29,131	41,898	22,931	8,135	9,002
Crops	21,660	14,246	16,326	21,732	11,552	3,381	3,747
Livestock	21,186	12,586	12,805	20,166	11,379	4,754	5,254
Government payments	399	655	1,228	2,188	1,555	774	1,080
Farm-related income	1,676	1,307	1,154	1,834	1,227	454	1,503
Cash expenses	33,927	19,403	22,413	32,962	17,521	6,788	14,341
Net cash income	10,994	9,391	9,099	12,958	8,192	2,575	(2,757)
Percent of total:	Percent						
Number of farms	0.8	1.5	3.6	10.9	13.2	9.7	60.3
Gross cash income	22.7	14.6	15.9	23.2	13.0	4.7	5.9
Cash receipts from marketings	23.7	14.8	16.1	23.2	12.7	4.5	5.0
Crops	23.4	15.4	17.6	23.5	12.5	3.6	4.0
Livestock	24.0	14.3	14.5	22.9	12.9	5.4	6.0
Government payments	5.1	8.3	15.6	27.8	19.7	9.8	13.7
Farm-related income	18.3	14.3	12.6	20.0	13.4	5.0	16.4
Cash expenses	23.0	13.2	15.2	22.4	11.9	4.6	9.7
Net cash income	21.8	18.6	18.0	25.7	16.2	5.1	-5.5

1/ Farm operation earnings may be share shared by one or more households, partners, contractors, or shareholders in corporate farms.

Now and Then: A Comparison of Farm Production In 1975 and 1995

Changes in cash receipts can reveal trends in the commodity mix produced by the farming sector and regional shifts in production.

Production of agricultural commodities is the principal determinant of the year-to-year changes in farm income. And weather, through its effects on crop yields, is the driving force behind the volatility in production. Price fluctuations and inventory accumulations or drawdowns also play a role in determining the level of national, regional, and State farm income, but these tend to be functions of production levels in the current and prior year. Production is reflected in cash receipts, value of inventory change, and of home consumption, and can be measured as their sum. However, cash receipts comprise most of the total and may be used as a proxy for value of production.

Cash receipts have been computed and published by State and commodity for decades and provide a voluminous database with significant historical information. Historical comparisons can reveal national trends where specific commodities have increased or declined in importance, changes in the commodity mix comprising the farming sector within individual States, and regional shifts in production of individual commodities.

For readers and users whose interests are more focused on a commodity, State, or region, there is the opportunity to examine farm revenues to determine if changes have occurred in the mix or relative importance of specific commodities across States or regions and if those changes have positively or negatively affected farm income. One effective means of facilitating such an analysis is to contrast snapshots at two points in time, perhaps 20 years apart. In doing so, one must take into account the difference in factors beyond the control of producers which may have affected production, such as weather extremes, changes in farm programs, and unusual economic conditions. An exhaustive analysis is beyond the scope of this publication, but a comparison of 1995 and 1975 is presented with the intent of being suggestive of the myriad of State and commodity analyses that are feasible.

It is important to remember that inflation makes it hard to compare dollar figures representing estimates spaced 20 years apart. An instructive way to minimize the effects of inflation and detect changes in the structure of revenues is to work with the share of cash receipts represented by various farm products for the selected years. Revenue shares computed annually as the percent of the total sales summarize the combined changes of quantity and price at each point in time.

Commodity Mix Reflects Changes in Eating Habits, Export Demand

Cash receipt composition reflects changes in domestic and export demand. Many of the differences noted over the last

20 years may be a reflection of changes in our domestic eating habits. Relative revenues from vegetables and fruits show an increase between 1975 and 1995 (table 6). Lettuce, which was not even in the top 25 commodities ranked in 1975, was ranked 16th in 1995, ahead of rice. While the 1995 ranking of lettuce likely reflects the increased frequency with which people are eating out and the pervasiveness of salad bars in all types of food establishments, it also illustrates some of the unusual conditions that must be considered in this type of analysis. Problems with lettuce production in the spring of 1995, caused a sizable jump in prices, and a consequent 50-percent rise in cash receipts. Even so, checks of the published 1993 and 1994 rankings show lettuce as number 17 and number 23 for these years, helping to confirm its current position among the top 25 commodities. Other changes identified over the 20-year period probably also are related to changing consumer preferences. Relative receipts from food grains have declined. Relative hog receipts have fallen as a percent of total, while broiler revenues have expanded significantly. Dairy and egg revenues show a slight decline.

In the same time frame, a rapidly-growing greenhouse and nursery industry has more than doubled its portion of total sector revenues. By contrast, tobacco receipts have declined as a share of cash earnings, reflecting falling domestic consumption that has not been offset by expanded exports. Cotton gained an increased share of 1995 receipts as compared with 1975, taking advantage of the strong export demand in recent years, and is undergoing a significant regional shift in production.

Fruit and Vegetable Share of Cash Receipts Up, Hogs Down

In 1975, fruits and vegetables together represented 10 percent of revenues. By 1995 their share had increased to 13.8 percent. The leading fruits in 1995 were grapes, oranges, and apples. Each of these commodities increased their ordinal ranking among the top 25 between 1975 and 1995. Grapes were 15th in 1995, up from 25th in 1975.

Total livestock receipts appear to be a modestly smaller share of the total marketings in 1995 than in 1975, but this generalization masks significant changes within the livestock sector. Notably, the 2-decade period has witnessed a sizable decline in the importance of hog revenues and a parallel expansion in receipts from broilers. Cattle and calves remained the number one commodity in cash receipts from 1975 to 1995, although the 1995 share was down by 1.4 percentage points, from 19.7 percent of all receipts to 18.3 percent.

Greenhouse/Nursery Output Responds to Increased Demand

In the last 2 decades, a rapidly growing greenhouse and nursery industry has more than doubled its portion of total sector revenues. Changing lifestyles and rising disposable incomes have increased purchases by consumers, particularly for lawn and yard products. The growth of suburban office parks in campus-like settings has also contributed to a surge in demand for ornamental plants. Production tends to be concentrated in heavily-populated, coastal states. Producers are often located near population centers, where they take advantage of their proximity to consumer markets by specializing in farm products that have a high value per acre and are relatively perishable and costly to transport. Other leading commodities produced in these areas include vegetables and fruits. Land values are high around population centers and farming must compete with nonagricultural uses of the land. As a consequence, only high-valued crops can outbid the competition in these states.

Cotton Production Shifts Toward Southeast

Cotton maintained its 9th position in the ordinal rankings but increased its share of total cash receipts from 2.6 percent in 1975 to 4.1 percent in 1995. A substantial share of cotton production shifted from the southwestern states to southeastern states. Cotton's higher share of U.S. farm receipts in 1995, as compared with 1975, is the consequence of strong export demand in recent years. The regional shift is apparent in that California and Arizona each slipped in state rankings, while Texas, Georgia, Mississippi, and

North Carolina advanced within the ranking. Planted area of cotton has expanded by 3.5 million acres since 1993. Georgia, Texas, North Carolina, Louisiana, Arkansas, and Alabama accounted for 75 percent of this recent acreage increase. Acreage in California and Arizona expanded far less rapidly in response to recent cotton price increases, accounting for 5 percent of additional cotton area planted in 1995 over 1993. The regional shift from the Southwest to the Southeast is the result of changing comparative advantage in costs of production.

Farmers in the southeastern states have moved rapidly to expand production in recent years in order to take advantage of the rebound in profitability of a crop that for so long was the backbone of the region's economic history. The resurgence of yields, attributable to the success of the government-sponsored boll weevil eradication program, restored the profitability of upland cotton and the recent rise in market prices has brought a degree of prosperity to producers that has not been seen in decades; dating back to the initial infestation of the boll weevil. Producers of cotton grown on irrigated lands in the southwestern United States and California, are experiencing a continual degradation in the economics of production. The costs of irrigation water is rising due to competition from other uses, particularly urban demands, and land irrigated for decades is losing productivity. Even though cotton prices have been high, alternative uses for farmland are particularly competitive in California.

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Figure 16 -- Hogs decline and broilers expand as source of farm sector revenues

Percent of total farm cash receipts

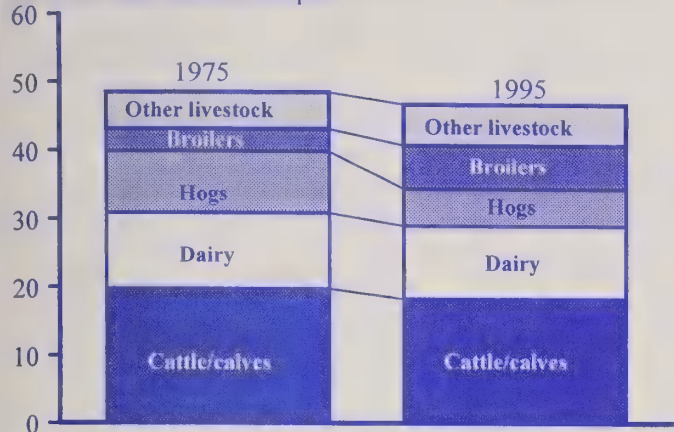


Figure 17 -- Grains and tobacco fall; while cotton, fruits,vegetables, and greenhouse shares increase

Percent of total farm cash receipts

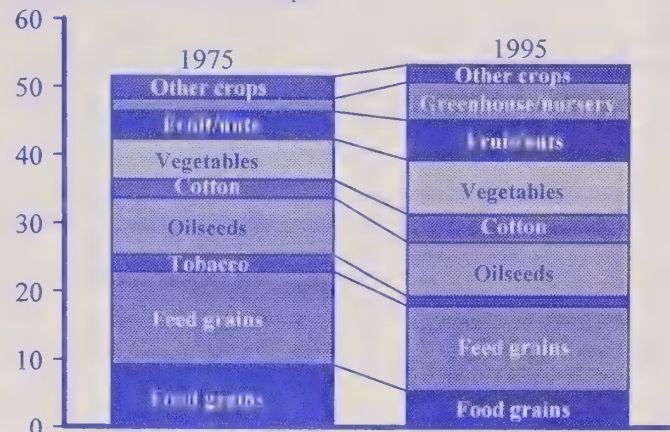


Figure 18 -- Receipt shares of top 10 states in 1995 rose and fell from 1975

Percent of total cash receipts

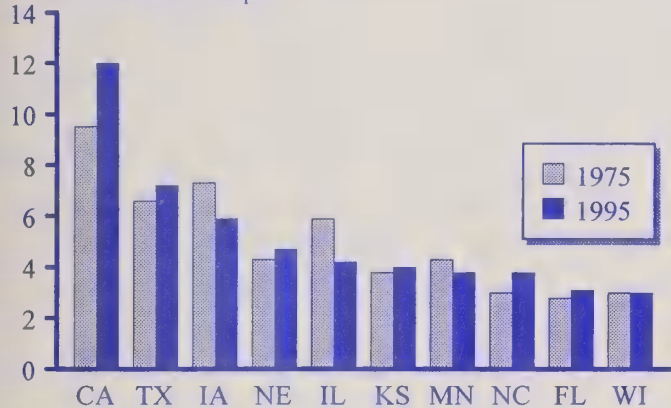
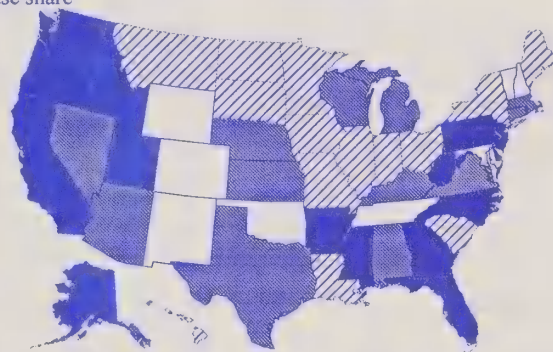


Figure 19--State shares of receipts changed from 1975

Corn belt states share of cash receipts down

Top fruit and vegetable producing states --California, Florida, and Washington increase share



■ >110 percent of 1975 share
 ■ 100-110 percent of 1975 share
 ■ 90-99 percent of 1975 share
 ■ <90 percent of 1975 share

Figure 20 -- Cattle most important to Texas and Kansas, hogs in Iowa, and broilers in the South

\$ billion in livestock receipts

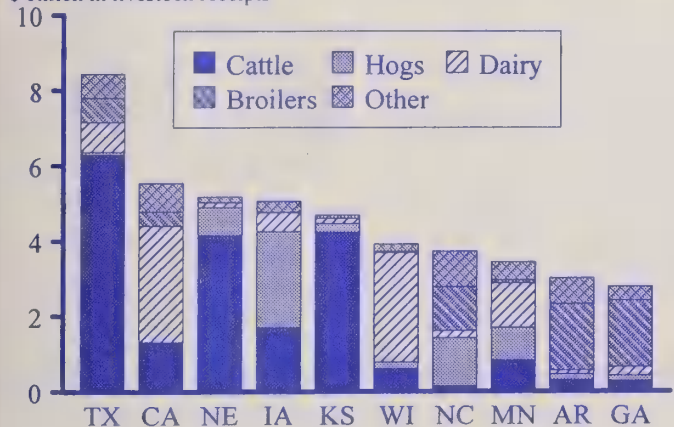


Figure 21 -- Fruits and vegetables important in California, Florida and Washington

\$ billion in crop receipts

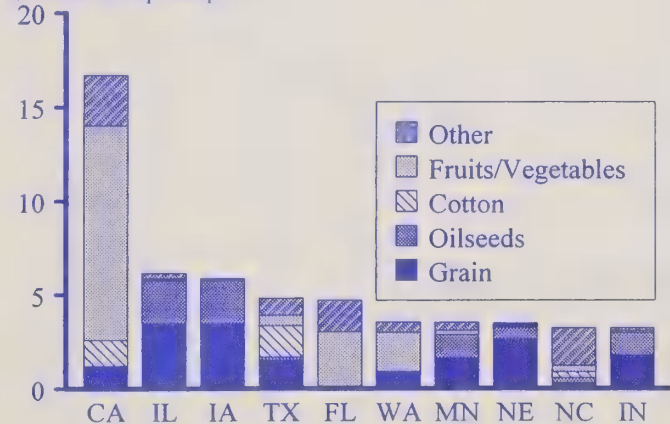


Table 5 --Cash receipts, by commodity groups and selected commodities, United States , 1975 and 1995

Commodity	1975	1995	Percent share of total Cash receipts	Percent share of total Cash receipts	Change
			1975	1995	1995-1975
All commodities	88,901,843	185,750,021	100.00%	100.00%	
Livestock and products	43,088,763	86,843,791	48.47%	46.75%	-1.71%
Meat animals	25,822,403	44,615,680	29.05%	24.02%	-5.03%
Cattle and calves	17,520,176	33,983,198	19.71%	18.30%	-1.41%
Hogs	7,916,423	10,073,641	8.90%	5.42%	-3.48%
Dairy products	9,922,533	19,923,558	11.16%	10.73%	-0.44%
Poultry/eggs	6,810,241	19,121,086	7.66%	10.29%	2.63%
Broilers	2,953,039	11,760,787	3.32%	6.33%	3.01%
Chicken eggs	2,814,309	3,958,976	3.17%	2.13%	-1.03%
Crops	45,813,080	98,906,230	51.53%	53.25%	1.71%
Food grains	8,195,336	10,068,802	9.22%	5.42%	-3.80%
Rice	1,136,012	1,280,594	1.28%	0.69%	-0.59%
Wheat	7,026,110	8,769,169	7.90%	4.72%	-3.18%
Feed crops	12,183,354	23,143,873	13.70%	12.46%	-1.24%
Corn	8,530,023	17,400,921	9.59%	9.37%	-0.23%
Sorghum grain	1,301,630	1,221,962	1.46%	0.66%	-0.81%
Cotton	2,310,744	7,566,839	2.60%	4.07%	1.47%
Tobacco	2,155,022	2,594,363	2.42%	1.40%	-1.03%
Oil crops	7,480,458	14,828,821	8.41%	7.98%	-0.43%
Vegetables	5,346,116	14,773,370	6.01%	7.95%	1.94%
Potatoes	1,133,136	2,594,306	1.27%	1.40%	0.12%
Lettuce	371,504	1,915,213	0.42%	1.03%	0.61%
Tomatoes	957,051	1,577,065	1.08%	0.85%	-0.23%
Fruits/nuts	3,562,768	10,774,951	4.01%	5.80%	1.79%
Oranges	690,539	1,605,227	0.78%	0.86%	0.09%
Apples	502,151	1,601,732	0.56%	0.86%	0.30%
Grapes	615,924	2,022,189	0.69%	1.09%	0.40%
All other crops	4,579,282	15,155,211	5.15%	8.16%	3.01%
Greenhouse/nursery	1,689,422	10,407,898	1.90%	5.60%	3.70%

Table 6 -- Leading commodities and States: 1975 vs. 1995 (ordered by 1975)

Commodity	Cumulative			Leading 10 States by rank									
	United States		State Percent	Percent of commodity production									
	Percent	Rank		1	2	3	4	5	6	7	8	9	10
Total 1975	--	--	51.2%	CA 9.5%	IA 7.4%	TX 6.5%	IL 6.0%	NE 4.3%	MN 4.3%	KS 3.8%	IN 3.3%	OH 3.1%	NC 3.0%
Total 1995	--	--	51.7%	CA 12.0%	TX 7.2%	IA 5.9%	NE 4.7%	IL 4.2%	KS 4.0%	MN 3.8%	NC 3.8%	FL 3.1%	WI 3.0%
All livestock 1975	47.9%	--	52.2%	IA 9.1%	TX 7.1%	CA 6.5%	NE 5.0%	WI 4.9%	MN 4.8%	IL 4.4%	MO 3.7%	KS 3.5%	CO 3.1%
All livestock 1995	46.8%	--	52.8%	TX 9.7%	CA 6.4%	NE 6.0%	IA 5.8%	KS 5.4%	WI 4.5%	NC 4.3%	MN 4.0%	ARS 3.5%	GA 3.2%
All crops 1975	52.1%	--	54.3%	CA 12.2%	IL 7.5%	TX 6.0%	IA 5.8%	KS 4.0%	MN 3.9%	FL 3.9%	IN 3.8%	NE 3.7%	NC 3.6%
All crops 1995	53.2%	--	56.1%	CA 16.9%	IL 6.2%	IA 6.0%	TX 4.9%	FL 4.8%	WA 3.6%	MN 3.6%	NE 3.5%	NC 3.3%	IN 3.3%
Cattle and calves 1975	19.5%	1	65.6%	TX 12.4%	IA 9.0%	NE 8.6%	KS 6.3%	CA 6.3%	CO 6.3%	OK 5.0%	SD 4.7%	MO 3.7%	MN 3.3%
Cattle and calves 1995	18.3%	1	70.8%	TX 18.5%	KS 12.5%	NE 12.2%	CO 6.1%	OK 5.2%	IA 5.0%	CA 3.8%	SD 3.1%	MN 2.5%	MT 2.0%
Dairy	11.0%	2	63.3%	WI 15.2%	CA 10.1%	NY 8.6%	MN 6.8%	PA 6.7%	MI 3.8%	OH 3.8%	TX 3.0%	IA 3.0%	MO 2.4%
Dairy	10.7%	2	67.4%	CA 15.5%	WI 14.6%	NY 7.5%	PA 7.3%	MN 6.0%	TX 4.0%	MI 3.6%	WA 3.4%	OH 3.0%	ID 2.6%
Corn 1975	9.9%	3	81.0%	IL 21.1%	IA 17.6%	NE 9.8%	IN 9.5%	MN 6.4%	OH 5.5%	KS 3.2%	TX 2.9%	NC 2.5%	MI 2.5%
Corn 1995	9.4%	3	83.6%	IA 19.4%	IL 17.9%	NE 11.6%	IN 9.1%	MN 6.9%	OH 5.3%	WI 3.6%	TX 3.5%	KS 3.3%	SD 3.0%
Hogs 1975	8.9%	4	79.2%	IA 23.8%	IL 14.0%	IN 8.1%	MO 6.9%	MN 6.7%	NE 6.3%	OH 3.9%	SD 3.3%	KS 3.1%	NC 3.0%
Hogs 1995	5.4%	7	82.0%	IA 25.3%	NC 12.7%	MN 8.6%	NE 7.3%	IN 7.1%	IL 6.6%	MO 6.0%	SD 3.1%	OH 3.0%	KS 2.3%
Wheat 1975	8.1%	5	74.3%	KS 15.8%	ND 15.3%	OK 7.6%	MT 7.0%	WA 7.0%	TX 5.7%	MN 4.9%	NE 4.5%	SD 3.3%	OH 3.2%
Wheat 1995	4.7%	8	70.5%	ND 15.8%	KS 14.4%	MT 8.1%	WA 6.9%	OK 5.2%	CO 4.4%	ID 4.4%	SD 4.1%	NE 3.8%	TX 3.2%
Soybeans	7.9%	6	80.1%	IL 17.5%	IA 14.4%	IN 8.3%	OH 8.2%	AR 7.7%	MO 7.5%	MN 6.0%	MS 4.6%	LA 3.2%	TN 2.6%
Soybeans	7.1%	4	82.6%	IL 17.7%	IA 17.6%	IN 9.1%	MN 8.8%	OH 7.2%	MO 6.7%	NE 4.9%	AR 4.5%	SD 3.4%	KS 2.7%
Broilers 1975	3.2%	7	82.9%	AR 15.1%	GA 14.2%	AL 12.8%	NC 9.8%	MS 7.5%	MD 6.4%	TX 5.8%	DE 4.7%	CA 3.6%	ME 3.0%
Broilers 1995	6.3%	5	80.8%	GA 15.1%	AR 15.0%	AL 12.2%	NC 9.9%	MS 8.4%	TX 5.5%	DE 4.0%	MD 3.9%	VA 3.4%	CA 3.3%
Eggs 1975	3.1%	8	58.1%	CA 12.7%	GA 9.4%	AR 6.5%	NC 5.1%	PA 5.0%	AL 4.7%	TX 4.1%	IN 3.8%	FL 3.6%	ME 3.1%
Eggs 1995	2.1%	10	60.9%	ARS 7.4%	GA 7.3%	CA 7.3%	PA 6.7%	OH 6.4%	IN 6.0%	TX 5.5%	AL 5.4%	NC 5.1%	IA 3.7%
Cotton 1975	2.6%	9	93.7%	CA 24.2%	TX 21.8%	AR 11.7%	MS 11.3%	AZ 7.1%	LA 5.4%	AL 4.1%	TN 2.9%	GA 2.8%	MO 2.5%
Cotton 1995	4.1%	9	92.7%	TX 22.0%	CA 18.4%	MS 10.7%	GA 10.1%	ARS 8.1%	LA 7.1%	AZ 5.1%	NC 4.1%	TN 4.1%	MO 3.0%
Tobacco 1975	2.4%	10	96.8%	NC 44.1%	KY 18.9%	SC 8.7%	GA 7.1%	VA 6.9%	TN 5.7%	CT 1.7%	MD 1.3%	FL 1.3%	OH 1.0%
Tobacco 1995	1.4%	13	98.4%	NC 40.4%	KT 24.5%	TN 9.0%	VA 7.4%	SC 7.3%	GA 5.7%	OH 1.2%	FL 1.2%	IN 0.9%	MD 0.8%

Table 6 – Leading commodities and States: 1975 vs. 1995 (ordered by 1975) continued

Commodity	Cumulative			Leading 10 States by rank									
	United States		State	Percent of commodity production									
	Percent	Rank		1	2	3	4	5	6	7	8	9	10
Hay 1975	1.5%	12	61.5%	CA 24.3%	AZ 5.7%	WA 4.9%	MN 4.3%	ID 4.2%	CO 4.0%	TX 3.9%	KS 3.7%	NE 3.6%	OK 2.8%
Hay 1995	1.9%	11	56.1%	CA 17.5%	OR 6.5%	WA 5.9%	ID 5.8%	CO 4.7%	TX 3.5%	SD 3.2%	KS 3.1%	MN 3.0%	IA 2.8%
Sorghum grain 1975	1.4%	13	97.4%	TX 53.2%	KS 15.8%	NE 12.3%	OK 3.3%	CA 3.1%	AZ 2.5%	MO 2.5%	NM 2.2%	AR 1.4%	CO 1.1%
Sorghum grain 1995	0.7%	21	96.8%	KS 34.5%	TX 28.8%	NE 14.0%	MO 7.1%	AR 3.2%	OK 2.8%	IL 2.5%	LA 1.5%	SD 1.4%	CO 1.1%
Potatoes 1975	1.4%	14	77.2%	ID 18.7%	WA 13.9%	CA 10.9%	ME 7.8%	OR 5.4%	WI 5.0%	NY 4.8%	ND 4.4%	MN 3.4%	MI 2.9%
Potatoes 1995	1.4%	14	82.0%	ID 27.1%	WA 17.0%	CA 6.8%	WI 5.7%	OR 5.2%	CO 4.8%	ND 4.4%	ME 3.8%	MN 3.6%	MI 3.5%
Rice 1975	1.2%	15	100.0%	TX 28.3%	AR 27.2%	CA 23.5%	LA 16.4%	MS 4.1%	MO 0.5%	-	-	-	-
Rice 1995	0.7%	20	100.0%	ARS 39.6%	CA 21.8%	LA 15.4%	TX 10.1%	MS 9.6%	MO 3.5%	-	-	-	-
Tomatoes 1975	1.0%	16	91.7%	CA 60.8%	FL 15.2%	OH 5.0%	NJ 2.2%	IN 1.8%	SC 1.7%	TX 1.5%	AR 1.3%	MI 1.1%	PA 1.1%
Tomatoes 1995	0.8%	19	95.4%	CA 54.9%	FL 24.6%	GA 3.6%	VA 2.8%	OH 2.3%	SC 2.0%	NJ 1.7%	MI 1.3%	IN 1.2%	TN 1.1%
Lettuce 1975	--Not among the 25 Top-ranked Commodities in 1975--												
Lettuce 1995	1.0%	16	100.0%	CA 72.3%	AZ 25.2%	NJ 0.6%	FL 0.5%	NM 0.4%	CO 0.3%	WA 0.2%	OH 0.2%	NY 0.1%	HI 0.0%
Sugar beets 1975	0.9%	17	89.8%	CA 29.1%	ID 10.0%	MN 9.5%	CO 9.1%	WA 7.4%	ND 6.4%	NE 6.1%	MI 6.0%	WY 3.6%	MT 2.7%
Sugar beets 1995	0.6%	22	80.4%	MN 28.8%	ND 14.6%	MI 10.3%	CA 10.0%	MT 4.6%	WY 4.4%	NE 4.0%	OR 1.3%	WA 1.3%	TX 1.2%
Turkeys 1975	0.9%	18	77.6%	MN 16.1%	CA 12.8%	NC 11.3%	TX 7.2%	MO 6.5%	AR 5.5%	IA 5.3%	WI 4.7%	VA 4.3%	CO 3.8%
Turkeys 1995	1.5%	12	77.9%	NC 21.0%	MN 10.8%	ARS 8.7%	MO 8.3%	CA 7.7%	VA 7.2%	IN 5.1%	PA 3.3%	IA 3.2%	SC 2.7%
Peanuts 1975	0.8%	19	99.5%	GA 45.4%	AL 13.9%	TX 10.9%	NC 9.7%	VA 7.2%	OK 6.0%	FL 4.8%	SC 0.8%	NM 0.5%	MS 0.3%
Peanuts 1995	0.5%	23	100.0%	GA 41.2%	TX 15.3%	AL 13.7%	NC 10.2%	VA 6.1%	OK 5.9%	FL 5.2%	NM 1.4%	SC 0.9%	AZ 0.0%
Sugarcane for sugar 1975	0.8%	20	100.0%	FL 41.8%	HI 31.9%	LA 24.1%	TX 2.4%	-	-	-	-	-	-
Sugarcane for sugar 1995	0.5%	24	100.0%	FL 51.7%	LA 29.1%	HI 14.6%	TX 4.7%	-	-	-	-	-	-
Oranges 1975	0.8%	21	100.0%	FL 71.8%	CA 24.9%	AZ 1.9%	TX 1.3%	LA 0.3%	-	-	-	-	-
Oranges 1995	0.9%	17	100.0%	FL 72.6%	CA 26.4%	TX 0.6%	AZ 0.5%	n.a.	-	-	-	-	-
Barley 1975	0.7%		91.6%	CA 19.1%	ND 18.8%	MN 13.2%	MT 11.5%	ID 8.6%	WA 6.4%	CO 4.1%	SD 3.3%	OR 3.3%	AZ 3.2%
Barley 1995	--Not among the 25 top-ranked commodities in 1995--												
Apples 1975	0.7%	23	79.8%	WA 32.6%	NY 10.9%	MI 7.2%	PA 7.0%	VA 5.1%	CA 5.0%	NC 3.9%	WV 3.6%	OH 2.6%	ID 1.9%
Apples 1995	0.9%	18	81.8%	WA 54.8%	CA 9.5%	MI 6.4%	PA 3.0%	VA 2.4%	NC 1.4%	OH 1.4%	OR 1.1%	WV 1.0%	IL 0.9%

Table 6 -- Leading commodities and States: 1975 vs. 1995 (ordered by 1975) continued...

Commodity	Cumulative			Leading 10 States by rank										
	United States		State	Percent of commodity production										
	Percent	Rank		Percent	1	2	3	4	5	6	7	8	9	10
Grapes 1975	0.6%	24	99.8%	CA	86.4%	NY	WA	PA	AZ	MI	OH	AR	NC	SC
Grapes 1995	1.1%	15	99.9%	CA	90.9%	WA	NY	AZ	MI	OR	PA	AR	GA	OH
Forest products 1995	0.5%	25	70.2%	WA	16.4%	NC	WI	GA	AL	OR	MS	TX	AZ	VA
Forest products 1995				(Note: In recent years only Christmas trees are included in cash receipts and other forest products are included in farm related income.)										
Almonds 1975				--Not among the 25 top-ranked commodities in 1975--										
Almonds 1995	0.5%	25	100.0%	CA	100.0	-	-	-	-	-	-	-	-	-

Farm Sector Debt Up \$4 Billion in 1995

Rising debt, interest rates affect debt repayment ability.

Farm Debt Nearly \$151 Billion in 1995

Total farm business debt rose by about \$4 billion during 1995, reaching nearly \$151 billion (fig. 22), its highest since 1986. The combined effect of lower net cash income, rising farm debt, and higher interest rates burdened farm operators' ability to service their debt obligations in 1995.

Interest Expenses Increase in 1995

Interest expenses rose about \$1 billion in 1995, contributing significantly to the \$1.7 billion reduction in net cash income. Almost \$750 million of the increase in interest expense was on nonreal estate debt (fig. 23). Despite declining in the second half of the year, average interest rates on new bank loans to the farm sector increased from 7.8 percent in 1994 to 9.5 percent in 1995.

Actual debt relative to the maximum amount of debt supportable by net cash income available for loan payments measures debt repayment capacity utilization. (See AIS-58 for a description of this measure). Operators with debt are using some portion of their credit capacity. Debt repayment capacity utilization, the ratio of actual debt to maximum debt repayment capacity, measures the extent of farm operators use of their potential credit repayment ability. A rise in utilization indicates that debt has increased faster than farmers' ability to repay, while a fall suggests that income is growing at a rate that allows easier repayment of debt, even though debt levels may be rising. Higher debt levels, combined with relatively low 1995 net income and rising interest expenses, translated into an increase in debt repayment capacity utilization, as evidenced by its rise from about 45 percent in 1993 to over 58 percent in 1995 (fig 27).

Expanding Operations Using Cash, Not Debt

Farm mortgage debt rose about 2 percent in 1995, a relatively modest increase compared with the rise in the value of farm real estate. Nominal land values have been rising annually since 1987, and, in some Corn Belt States, the rate of growth has exceeded 10 percent in recent years.

While farm debt is rising, it does not appear to be increasing as rapidly as land values (fig. 25). The rate of growth in land values and anecdotal evidence suggests that farmers were bidding up the price of land as they seek to gain

economies of size through expansion. However, the rising price reflects the addition of adjacent acreage to existing operations, with sales being cash transactions, rather than relying on issuance of new debt.

Nonreal Estate Debt Rising More Rapidly Than Mortgage Debt

Farm business nonreal estate debt rose over 12 percent from the beginning of 1993 through the end of 1995 (fig. 22). During this same period, farm mortgage debt increased less than 5 percent. If these relative growth rates persist, nonreal estate debt will exceed farm mortgage debt for the first time in the year 2000. This is due partially to the growing use of favorable credit terms offered by machinery manufacturers and input suppliers. While supplier financing originated as a means of increasing sales, the business units providing this service have developed into profit centers on their own.

The shift away from real estate credit also reflects a rise in cash sales of farmland, which has reduced the demand for purchase money mortgages. Simultaneously, farmers' appear to be more reluctant to mortgage real estate to obtain slightly more favorable loan conditions when financing short- and intermediate-term assets.

Farm Credit System Reports Growth in Nonreal Estate Lending

The change in Farm Credit System (FCS) total farm loans outstanding increased from 1 percent in 1994 to over 4 percent in 1995. Rapidly rising nonreal estate loan volumes have accounted for much of the recent increase. Nonreal estate loans rose 6 percent in 1994 and 12 percent in 1995. FCS now accounts for over 17 percent of all nonreal estate loans, its largest share of this market since 1985.

Farm Credit System real estate lending has not grown at a similar pace. However, after declining annually in all but one year during 1984-94, FCS real estate lending posted a 1995 gain of over \$210 million. The FCS has recently emphasized convenience in loan application and short approval time on smaller mortgage loans, attempting to gain a larger share of the part-time and lifestyle farm markets.

Farm debt - James Ryan Tel: (202) 219-0796 E-Mail: jim-ryan@econ.ag.gov

Table 7 -- Farm business debt outstanding, by lender, December 31.

Lender	1984	1990	1991	1992	1993	1994	1995	Change 1994-95 Percent
Real estate	106,074	74,732	74,944	75,421	76,026	77,642	79,129	1.9%
Farm Credit System	46,596	25,924	25,305	25,408	24,889	24,583	24,797	0.9%
Farm Service Agency	9,523	7,639	7,041	6,394	5,837	5,463	5,043	-7.7%
Life insurance companies	11,891	9,704	9,546	8,765	8,985	9,023	9,079	0.6%
Commercial banks	9,626	16,288	17,417	18,757	19,595	21,070	22,238	5.5%
CCC storage facility	623	7	4	2	0	0	0	n.a
Individuals & others	28,438	15,169	15,632	16,095	16,719	17,503	17,971	2.7%
Non real estate	87,091	63,230	64,274	63,631	65,927	69,120	71,482	3.4%
Commercial banks	37,619	31,267	32,854	32,912	34,939	36,730	37,748	2.8%
Farm Credit System	18,092	9,848	10,222	10,346	10,540	11,180	12,472	11.6%
Farm Service Agency	13,740	9,374	8,213	7,143	6,239	6,020	5,092	-15.4%
Individuals & others	17,640	12,740	12,985	13,230	14,210	15,190	16,170	6.5%
Total debt (excluding CCC)	193,165	137,962	139,218	139,052	141,953	146,762	150,611	2.6%
Farm Credit System	64,688	35,773	35,527	35,753	35,429	35,763	37,270	4.2%
Farm Service Agency	23,263	17,014	15,253	13,538	12,076	11,482	10,135	-11.7%
Commercial banks	47,245	47,556	50,271	51,669	54,533	57,800	59,987	3.8%
Life insurance companies	11,891	9,704	9,546	8,765	8,985	9,023	9,079	0.6%
Individuals & others	46,078	27,916	28,620	29,327	30,929	32,693	34,141	4.4%

Figure 22 -- Farm business debt still rising ... but still below early 1980's

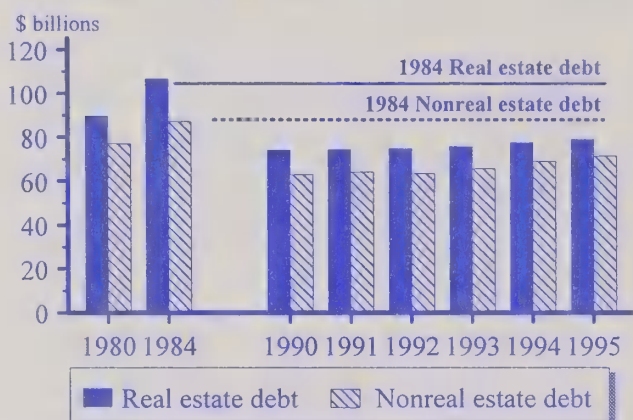


Figure 23 -- Interest expenses rising in 1994 and 1995, but below the early 80's

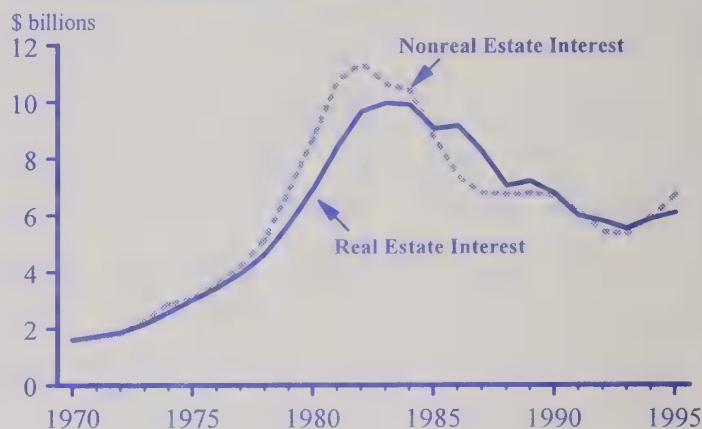


Figure 24 -- Banks' share of farm credit growing, Farm Credit System's share no longer declining

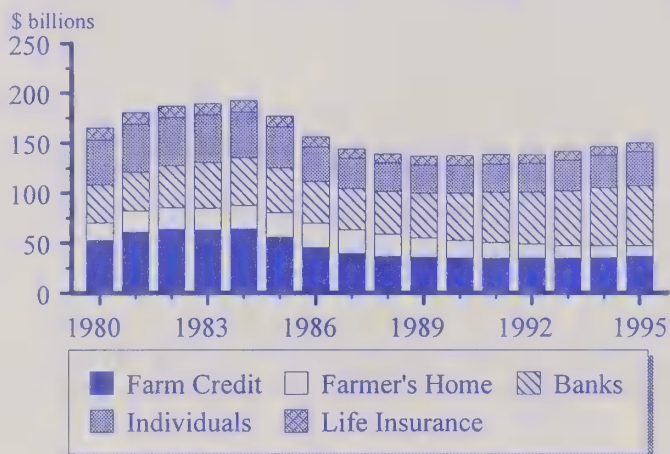


Figure 25 -- Change in value of real estate and total level of debt outstanding at year's end

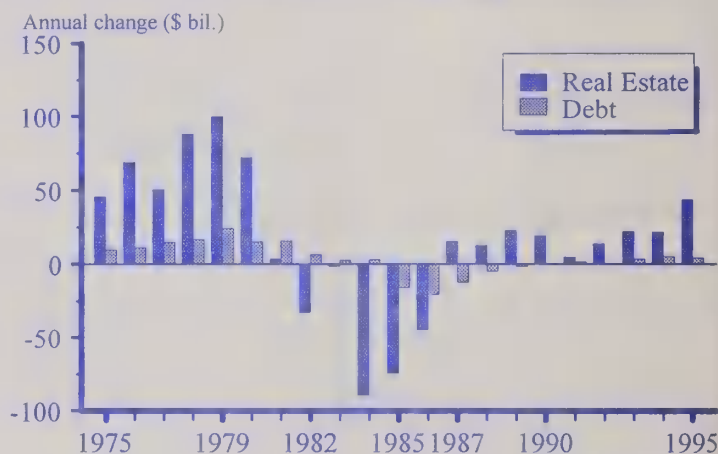


Figure 26 -- Farm operators actual debt and debt repayment capacity

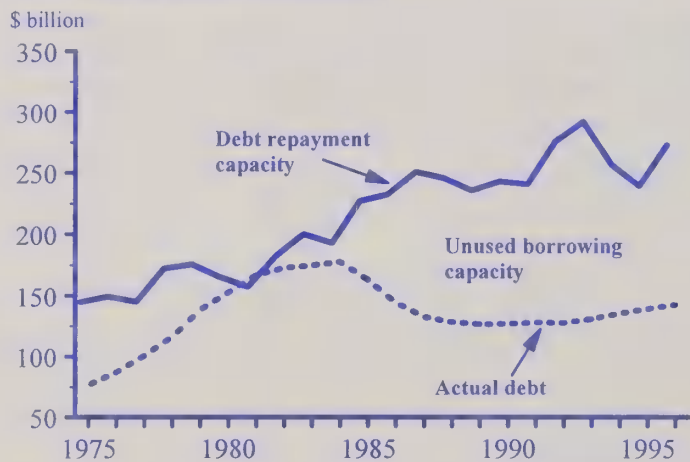
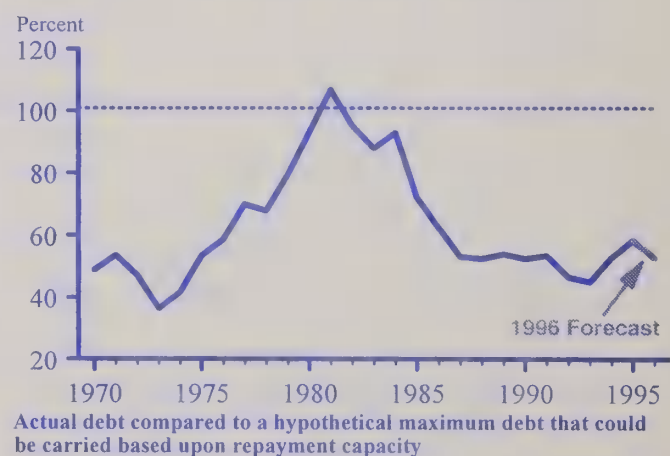


Figure 27 -- Slightly higher utilization of debt repayment capacity in 1995



Returns to Grain Crops Higher in 1995, But On Fewer Acres

Input prices up 2.6 percent, led by fertilizer and interest. Although input prices, and therefore production expenses, rose, generally higher commodity prices led to higher cash returns.

Acres Planted Down 1.7 Percent; Crop Prices 6.7 Percent Higher

Acres planted to major crops in 1995 tended to decline from 1994 with the exception of durum wheat, soybeans, and cotton. Total planted acreage declined 1.7 percent. Cotton acreage has shown dramatic increases in recent years, particularly in the Southeast. U.S. cotton acreage reached 16.9 million acres in 1995, up 23.4 percent from 1994, but yields dropped 26 percent.

The general price index for agricultural production inputs (NASS' Prices Paid Index) rose 2.6 percent for 1995. There was considerable variation among inputs. The largest percentage increase was for fertilizers (up 15.3 percent) followed by the interest expense category (up 11.6 percent).

On the return side, prices received for 1995 were up an average 6.7 percent for crops and down an average 3.2 percent for livestock. Cotton prices rose the most (17.4 percent) followed by food grains (12.6 percent) and feed grains (5.7 percent). Oilseed prices fell an average 5.5 percent. For livestock and dairy, red meat prices were down 5.6 percent and dairy products were down 1 percent.

How 1995 prices affected individual farmers and ranchers depends on each operation's mix of commodities. Higher corn prices offset higher costs of growing corn even though corn yields were down. On average, the enterprise saw higher net cash returns to corn production in 1995. On a corn-soybean operation, net returns would depend upon the relative mix of corn to soybeans. Hog returns improved slightly in 1995 so if this same operation also raised hogs, whole-farm returns would likely have increased.

New survey data for wheat and oats are underlying the 1994 and 1995 estimates for those crops. These data were collected through the Farm Costs and Returns Survey for the 1994 production year. In a few months, economic base-books will be available describing the financial and structural characteristics of growing these two commodities. The availability of these publications will be announced through the ERS Home Page (<http://www.econ.ag.gov>). Costs for 1994 have been revised for several other crops, particularly sugar crops and burley tobacco. Next September, new survey data for peanuts, sorghum, and burley tobacco will be incorporated into the costs of producing those crops.

Cost and Return Highlights by Commodity, 1995

Corn — Corn grain production in 1995 was estimated at 7.37 billion bushels, down 27 percent from the record 10.1

billion bushels in 1994. While the average corn yield declined substantially from 1994 to 1995, the 1995 yield was only 5 percent below the average for the previous 5-year period. More significant to corn growers was rising corn prices during 1995. Corn prices were about \$2.20 per bushel in early 1995, but rose to more than \$3 by year's end and continued upward into 1996. Higher corn prices more than offset lower corn yields and raised the gross value of corn production per acre by about 9 percent. The total cash cost per acre of corn was up 5 percent from 1994 to 1995, while the economic cost was only 4 percent higher. Returns above cash and economic costs increased about \$14 per acre in 1995.

Higher corn prices also reduced the deficiency payments to corn producers. With corn prices above the target price, most corn growers did not receive a deficiency payment. Only producers using the 0/85/92 option received program payments. Among all corn growers, Government program participation enhanced the gross value of corn production very little during 1995 and, on average, the added value of participation did not cover participation costs.

With average 1995 yields of 115.8 bushels per planted acre, corn growers would have covered all cash costs of production at a price of \$1.79, cash costs plus capital replacement at \$2.07, and total economic costs at \$2.88. This compares with 1994, where bumper yields of 143.15 bushels resulted in breakeven prices of \$1.38 (over cash costs), \$1.61 (over cash plus capital replacement costs), and \$2.25 (over total costs). Still, rising returns tended to improve the financial situation of the average corn acre. The corn enterprise itself improved and, with soybean returns essentially unchanged from 1994, the typical corn/soybean farm would have seen rising farm-level returns. For those corn and/or corn-soybean operations that also had hogs, the rising 1995 hog returns would have added even more to farm profits.

Grain sorghum — Area planted to sorghum fell to 9.5 million acres in 1995, from 9.8 million in 1994. Average U.S. grain sorghum yields fell from 66 bushels per planted acre in 1994 to 49 bushels in 1995. Total 1995 U.S. grain sorghum production was down 30 percent from 1994 (460 million bushels in 1995 vs. 650 million in 1994), and, as a result, the price per bushel at harvest rose by 46 percent.

The higher prices offset lower yields, raising the value of sorghum production 7 percent. Cash costs of producing the crop rose slightly, but returns over cash expenses rose by \$1.23 per acre. However, economic costs indicate that long-run residual returns to management and risk remained negative.

High 1995 prices eliminated deficiency payments and, with no mandatory set-aside requirements, program payments fell considerably. When program participation costs and returns are included in the budget, net returns to the average sorghum acre fell.

At 1995 average yields, the breakeven price for sorghum was \$2.52 (cash costs), \$3.08 (cash plus replacement costs), and \$4.08 (total economic costs). This compares with 1994's \$1.73, \$2.15, and \$2.90, respectively. As with other feed grains, sorghum returns over cash expenses rose for the year. Sorghum farms with a commodity mix including wheat would have added to these returns due to the generally rising wheat returns.

Oats — Oat acreage varies dramatically year over year as do yields. U.S. oat production was a record low in 1995 because of substantially reduced acres planted. Yields and prices were moderately higher in the chief oat-growing regions. Lower straw prices were offset by higher grain prices, keeping the gross value of production relatively steady.

In general, oat producers use less inputs than producers of other commodities. There were no significant changes in costs for 1995. Total cash costs averaged \$73.80 per acre planted for grain, down about \$1 from 1994. However, the gross value of production rose by an even lesser amount, leaving net returns over cash costs down by about 50 cents per planted acre.

Barley — U.S. farmers planted barley on 6.68 million acres and produced 359.1 million bushels in 1995, 4 percent below 1994's production and the lowest since the drought-reduced crop of 1988. The area harvested for grain totaled 6.28 million acres, down 6 percent and the smallest since 1903. South Dakota reported the largest decline with planted acreage reduced from 340,000 acres in 1994 to only 180,000 acres in 1995, a 47-percent reduction. North Dakota, where one-third of the barley is produced, had a poor crop. Delayed planting due to a cool, wet spring followed by excessive heat in mid-June reduced yields drastically (18 percent). In Montana, cool, wet weather occurred later in the growing season, providing good conditions for high yields. Nationally, barley yields averaged 53 bushels per planted acre, up 1.5 bushels from 1994, but down from the record high yields in 1992.

Total cash costs rose 12.5 percent to \$108.64 per planted acre, while economic costs rose 9.4 percent to \$187.14 per acre. Value of the 1995 crop increased 25 percent from 1994 due to higher yields and prices. On a per bushel basis, the total economic costs averaged \$3.52, up 6.6 percent from 1994. Harvest price averaged \$2.53 per bushel, covering the cash costs, but only three-fourths of the economic costs.

At the national level, barley cash returns nearly doubled from 1994. However, there was wide regional variation due to weather effects on yields. Those farmers with cash costs near the national average would have had a breakeven price of \$2.04 per bushel, compared with \$1.86 in 1994. Total costs could be covered at a price of \$3.52.

Wheat — For 1995, U.S. farmers planted wheat on 69.2 million acres and produced 2,186 million bushels, down 5.8 percent from 1994. Area and production of spring wheat dropped as a result of late planting, while unfavorable harvest conditions reduced winter wheat production. Spring freezes also contributed to lower winter wheat production in the Southern Plains region. Despite a zero-percent ARP, planted area continued to decline for the third year in a row. Excess moisture and cool conditions prevented some spring wheat from being planted, especially in South Dakota, where planted area fell 40 percent from 1994 to 1.2 million acres in 1995. In Montana, the spring wheat area was up 14 percent as area that was not planted to winter wheat in the fall of 1994 was planted to spring wheat. Favorable rains and mild growing conditions increased plant populations above average in most winter wheat areas. However, several States, especially Kansas, reported record low head weights in 1995 as frost damage, disease, and rains during harvest reduced yields.

Nationally, wheat yields averaged 35.8 bushels per harvested acre, down 1.8 bushels from 1994 and the lowest in 4 years. In North Dakota (a major spring wheat producing State), yields were down 4.5 bushels per acre because of disease, insects, and summer heat. Among types of wheat, yields were lower for both durum and winter wheat, but slightly up from 1994 for spring wheat. Durum wheat yields dropped sharply to 30.5 bushels, down 5.1 bushels and the lowest since 1989.

Cash costs per planted acre rose 13 percent to \$93.36 per acre, while economic costs rose 10 percent to \$170.03 per acre. Lower wheat yields and increased production costs pushed per bushel total economic costs to \$5.33, a 15-percent increase. The price received at harvest averaged \$4.08 per bushel, an increase of \$.92. As a result, the gross value of production rose 22 percent, which was more than enough to cover cash costs and capital replacement, but not enough to cover total economic costs.

Wheat returns over cash expenses are difficult to interpret due to regional yield differences. National average yields fell slightly, but higher wheat prices were offsetting, and net cash returns rose. As with barley growers, those wheat farmers with a cost structure near the national average would have benefited from the rising returns. On the other hand, those farmers whose wheat crop was damaged and who had yields substantially below the national average would not have seen such high returns.

Rice — U.S. 1995 rice production was down 12 percent from 1994's record. Both rice acreage and yields declined. Plantings were down because of producers' response to a 5-percent acreage reduction program and declining prices at planting time. National average yields per planted acre fell 10 percent from the 1994 record because of poor growing conditions. Yields were reduced because of prolonged high temperatures in August covering most of the Gulf Coast and Delta growing regions. California also had less than ideal conditions as an exceptionally cool, wet spring delayed plantings and led to a slow start for plant development. Competition from heavy weed growth in the summer also contributed to the reduced California yields.

Despite lower yields, U.S. 1995 gross value of production increased dramatically compared with 1994 due to a huge jump in rice prices. Harvest-time prices were boosted by large world import demand, tight international long grain supplies and high prices, and diminished U.S. crop prospects. Total rice costs of production per planted acre averaged \$630.17 for 1995, 4 percent above 1994. Increased fertilizer and chemical costs offset lower seed and fuel costs. Higher interest charges boosted operating capital costs and higher value of production and share-rent costs increased land costs.

At U.S. average yields of 55.72 cwt per acre, cash costs would have been covered at a price of \$7.69. At the higher yields in 1994, cash costs would have been covered at \$6.93. But because higher prices raised the gross value of production, 1995 net returns over cash costs averaged \$60.03, compared with a minus \$21.22 in 1994. Long-run residual returns to management and risk improved significantly because of the higher rice prices, rising from a minus \$203.15 in 1994 to a minus \$141.51 in 1995. Of course, this is excluding program payments and the associated costs of participation. When these additional costs and returns are included, the long-run returns were still negative, but improving (minus \$53.91 in 1994 and minus \$50.59 in 1995).

Sugar beets — Sugar beet production in 1995 totaled 28 million tons, down 12 percent from 1994. Area planted totaled 1.44 million acres, 2.3 percent below 1994. The largest area decline was in California, where beet area fell 18 percent from 1994 to 117,000 acres in 1995. Planted acreage increased the most in Minnesota where beets were planted on 426,000 acres, an increase of 11,000 acres.

Sugar beet plantings experienced a late start in 1995 due to excessive soil moisture from a wet spring. Adverse weather conditions caused many northern States to complete planting 2 weeks behind normal. Heavy rains and hail in Colorado and Nebraska damaged the beet fields and a late spring freeze in Idaho caused many beet fields to be replanted. The hot weather and a heavy infestation of root aphids limited the crop's growth in Michigan. Cercospora leafspot infestation was more prevalent in 1995 than in many years in the Red River Valley and Great Lakes regions. Frequent delays due to heavy rains and wet fields made the 1995 harvest most difficult in the Red River Valley. In the Ohio Valley, the harvest was delayed due to erratic warm weather that was unsuitable for beet storage. Among beet producing States, Colorado suffered the most due to a difficult growing season; beet yields were down 4.5 tons. In 1995, above-average yields were reported in Wyoming only, 2.3 tons above 1994.

For sugar beet farmers, rising input prices raised total cash costs of producing beets 3 percent to \$563.36 per planted acre. Total variable cash costs rose to \$425.87 per acre, 1.6 percent above 1994. Beet yields per planted acre averaged 19.55 tons, 10 percent below 1994. Factors such as late planting, disease problems, and yield-reducing conditions at harvest were responsible for low yields. As a result, total cash costs on a per ton basis rose to \$28.82, a 15-percent increase over 1994.

Total economic costs and returns are difficult to discuss at this time, as both depend on 1995 beet prices, which are not yet available. The 1995 beet prices used for estimating the gross value of production and the share rent component of the land costs have been held at their published 1994 level. If 1995 beet prices were to remain at the 1994 level as the budget assumes, there would be an increase of 2 percent in the total economic costs and a loss of \$41 per acre. The 1995 cost and return estimates will be revised next year. The production costs and returns for 1994 published in this report are revised from those previously published. The revised 1994 total cash costs of producing sugar beets were down \$5.78 per acre from the previous 1994 estimate, and total economic costs were revised down \$11.77.

Sugarcane — Production of sugarcane for sugar and seed in 1995 was estimated at 30.9 million tons. This was virtually unchanged from 1994. Total U.S. harvested acreage was up slightly from the previous year while yields were unchanged. At the State level, however, Louisiana saw a sizable increase in acres to above 1993, while in Hawaii, acreage continued to decline as plantations were closed.

On the cost side, total U.S. cash expenses for growing the 1995 cane crop averaged \$831.81 per harvested acre, only \$1.36 more than in 1994. As with beets, hired labor accounts for the largest single expense. Labor costs fell \$7 per acre at the national level, although there were regional variations. This decrease is primarily due to the lessening importance of Hawaii (with its very high labor costs) in calculating the U.S. weighted average.

As with beets, economic costs of production are difficult to interpret. With the 1995 sugarcane price still unavailable at the State level, land costs are preliminary. If 1995 prices were to remain at 1994 levels as the budgets assume, there would be an increase of 3 percent in total U.S. economic costs. This would also result in increasingly negative long-run returns to management and risk. On the other hand, if prices rise, land costs would also rise but so would the value of the sugarcane, which would more than offset the increased land cost. This would result in higher returns to management and risk than are shown in the preliminary estimates.

Soybeans — Soybean production totaled 2.15 billion bushels in 1995, down 14 percent from the record high of 2.52 billion in 1994. Although the average soybean yield was much lower than in 1994, the 1995 yield was typical of recent history, only 3 percent below the previous 5-year average. In contrast, soybean prices surged higher in 1995, beginning the year at less than \$5.50 per bushel and ending it at around \$7. Despite higher prices, the gross value of soybean production was much the same in both 1994 and 1995. Per acre costs of soybean production were only slightly higher in 1995 with cash costs up 2 percent and economic costs up 1 percent. Overall, a decline in the value of soybean production, along with higher costs, caused returns above cash and economic costs to fall about \$2-\$4 per acre from 1994 to 1995.

With soybean returns over cash expenses relatively stable in 1995, the soybean farm's mix of commodities played a major role in determining farm profitability. Additional

corn acreage would likely have earned more money than in 1994 and hog cash returns were also up.

Peanuts — Area planted to peanuts continued to decline in 1995, and was the lowest since 1985. The 1.5 million acres planted to peanuts in 1995 had an average yield of just under 2,300 pounds. This compares with 1.6 million acres planted in 1994 with an average yield of just over 2,600 pounds. After recovering in 1994, peanut producers saw yields fall back almost to 1993 levels. U.S. production rose 36 percent from 1993 to 1994 only to fall by 18 percent from 1994 to 1995.

Average gross value of production per planted acre fell dramatically (from \$748.14 in 1994 to \$674.27 in 1995) while cash expenses fell only slightly (down \$2.47). Gross value of production exceeded cash production expenses in both 1994 and 1995. Prices change little from year to year due to the levels of the quota support rate, so effects on net returns are primarily due to changing yields. Residual returns to management and risk were positive in 1994 but became negative in 1995 because of the low yields.

Peanut production cost and return estimates for 1994 have been revised from those published previously to reflect new information from the most recent Farm Costs and Returns Survey. Gross value of production fell as price was revised downward.

Cotton — A strong export demand for cotton continued during 1995. Acres planted to cotton increased about 23 percent, with most of the increase occurring in the Southeast. However, average U.S. cotton yields decreased by more than 33 percent. Although prices remained high during 1995, lower yields reduced cotton returns 18 percent from 1994 to 1995.

Total variable cash expenses for the United States increased by about 8 percent from 1994 to 1995, with fertilizer, fuel, and repairs accounting for about 79 percent of the increase. U.S. total fixed cash expenses increased almost 9 percent as a result of higher interest rates and the method of allocating fixed costs among the farm's individual enterprises.

U.S. total economic costs increased from \$464 in 1994 to \$502 in 1995. Excluding the increase in total cash expense, capital replacement and unpaid labor accounted for 74 percent of the increase in total economic costs.

When the direct effects of Government programs for cotton are included in the estimates, gross returns, production costs, and net returns are all higher. There were no deficiency payments for cotton in 1995. Marketing loan proceeds were zero in 1995. The additional production costs are those incurred by producers to participate in the Government program for cotton (cover crop seed, fuel and lubricants, repairs, labor, etc.).

The total gross value of production for cotton without Government program effects for 1995 was \$388.79, while the total cash expenses were \$360.42. The total gross value of production for cotton with Government program effects for 1995 was \$389.37 and the total cash expenses were \$367.84.

Flue-cured tobacco — Total variable costs of producing an acre of flue-cured tobacco were essentially unchanged between 1994 and 1995. While most individual input costs increased, selling costs (warehouse fees, no-net-cost assessments, marketing assessments, and inspection and grading fees), declined from \$198 in 1994 to \$110 in 1995, offsetting increases in other inputs. A sell-off of flue-cured tobacco placed under the loan program lowered loan stocks, thereby decreasing the risk of losses in operating the price support program. The largest change between individual cost items per acre was selling costs (decreased by \$88), followed by fertilizer and lime (increased by \$30), and curing and heating fuel (increased by \$23).

Total ownership costs per acre rose 8 percent (\$523 to \$564) from 1994 to 1995. Continued increases in machinery prices raised capital replacement costs from \$290 in 1994 to \$321 in 1995. Both general farm overhead and land and quota costs decreased by almost 15 and 18 percent, respectively, reflecting an increase of \$10.20 per 100 pounds for the average market price of flue-cured tobacco and a decrease of 487 pounds per acre in yield. Land and quota charges decreased from \$979 per acre in 1994 to \$800 due to lower yields. General farm overhead declined by \$41 per acre.

Burley tobacco — The variable costs of producing an acre of burley tobacco in 1995 declined by \$25 (from \$2,441 to \$2,415). Total costs per acre, excluding land and quota costs, decreased from \$3,368 to \$3,333. Since per acre selling costs (marketing fees, no-net-cost and marketing assessments, and inspection and grading fees) are influenced by yields, the decline of 277 pounds in yield resulted in a \$109 per acre decrease between 1994 and 1995. Variable costs actually would have increased 2 percent from 1994 to 1995 if selling costs were excluded.

Machinery and barn ownership costs rose from \$508 to \$548 per acre (8 percent), capital replacement costs increased by \$5, but general farm overhead decreased by almost \$50 per acre. Land and quota charges declined from \$1,363 per acre in 1994 to \$1,200 in 1995 because yields were lower and market prices were a little higher.

Hogs — Both cash and economic costs of hog production changed little between 1994 and 1995. Rising corn prices throughout 1995 did not drive up feed costs from 1994 because annual average prices were much the same in each year. The value of market hogs increased from 1994 as barrow and gilt prices improved throughout the year from about \$32 per cwt in December 1994 to nearly \$50 by August 1995. In contrast, feeder pig prices were slower to respond and remained below 1994 levels during much of 1995. Returns above cash and economic costs improved for farrow-to-finish and feeder pig-to-finish operations because of greater hog prices. However, returns to feeder pig production were down in 1995.

Hog returns over cash expenses for 1995 rose considerably from 1994. Feed costs fell slightly for the year. For next year, however, high feed grain prices for the 1995 crop will likely have a sharp impact on livestock producers. For hog producers growing part or all their own feed, the decision to sell grain or feed it will be a major decision.

Milk — Cash and economic costs of producing milk for the United States in 1995 were down 3 percent from 1994. Much of the decrease was due to lower feed costs. With 1994 corn and soybean yields much improved, concentrate costs in 1995 declined almost 5 percent from a year earlier. Average 1995 hay costs were down 13 percent. Silage costs also declined 13 percent. Even though the total gross value of production declined 2 percent from 1994-95, residual returns to management and risk improved. Residual returns increased from a negative \$1.99 per hundredweight of milk sold in 1994, to a negative \$1.70 in 1995.

Cow-calf — Cash and economic costs for U.S. cow-calf operations in 1995 were relatively unchanged from 1994. Lower feeder cattle prices and pasture costs more than compensated for the 41-percent increase in grain costs per bred cow. Grain prices rose in response to drought conditions last summer and fall, and the late harvest. However, the total gross value of production declined 15 percent from 1994. As beef production increased in 1995 and more beef moved through the market, cattle prices declined considerably. Consequently, residual returns to management and risk declined further, reaching a negative \$272.85 in 1995.

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Figure 28 -- Feed grain production costs

Dollars per planted acre

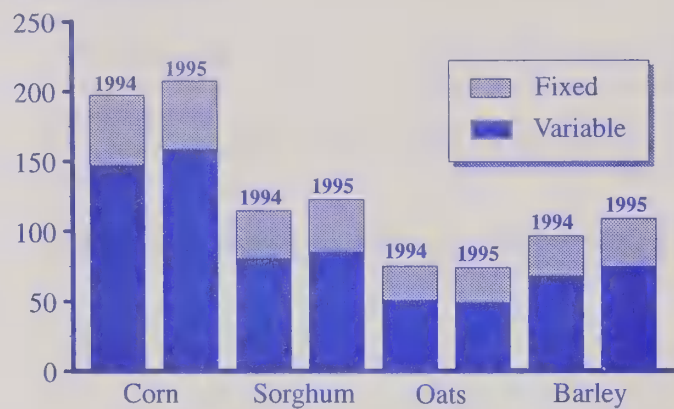


Figure 29 -- Food grain and sugar crop production costs

Dollars per planted acre

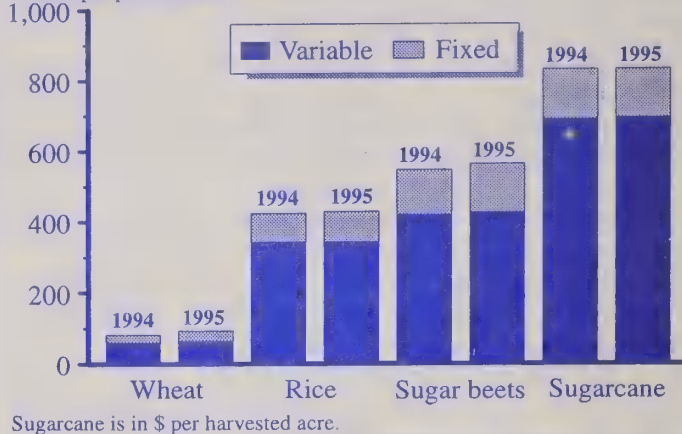


Figure 30 -- Oilseed and cotton production costs

Dollars per planted acre

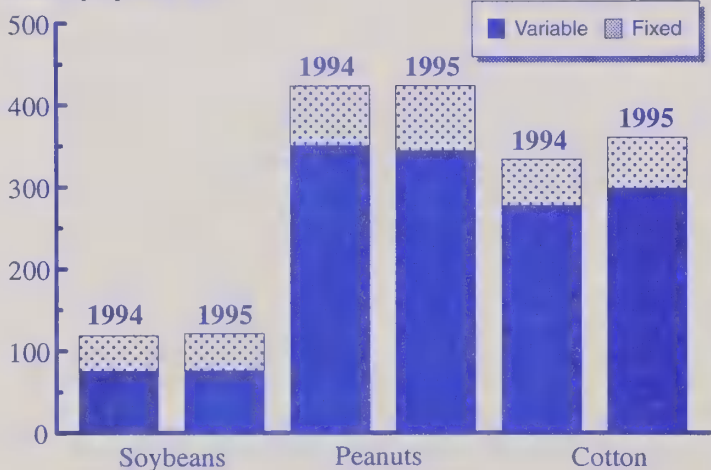


Figure 31 -- Hog production costs

Dollars per cwt gain

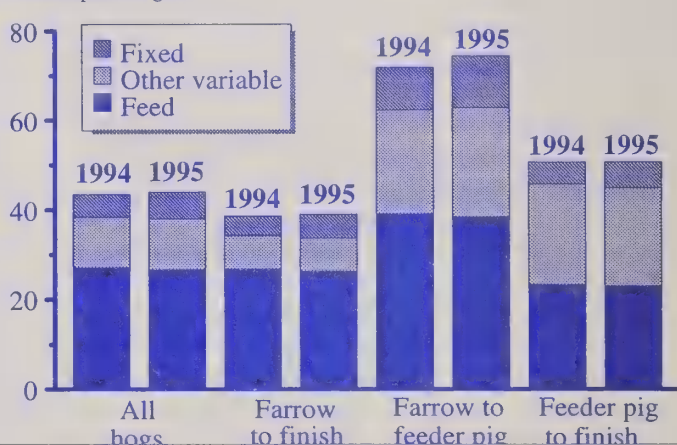


Figure 32 -- Cow-calf production costs

Dollars per bred cow

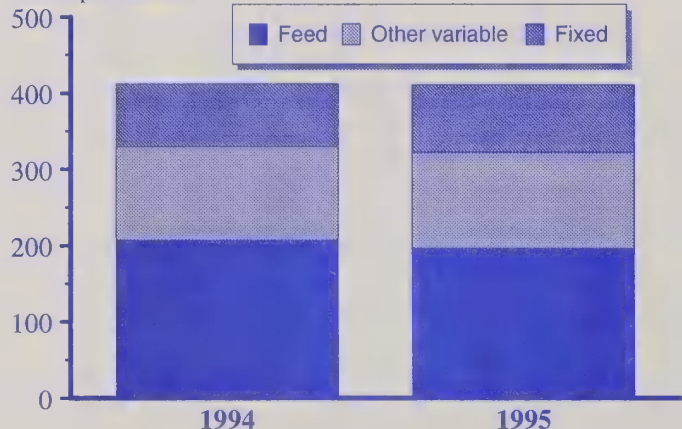


Figure 33 -- Milk production costs

Dollars per cwt

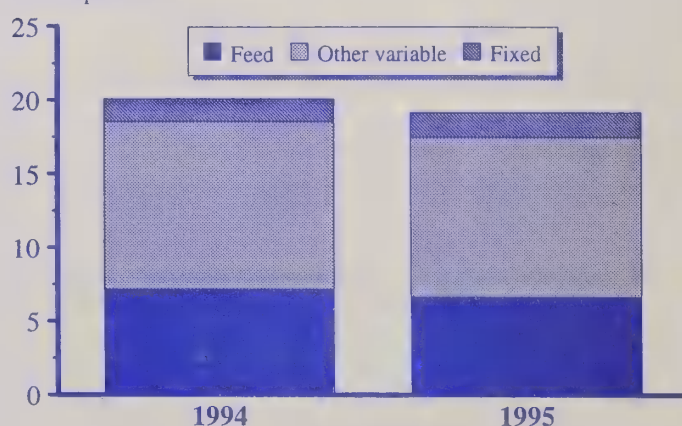


Figure 34 -- Feed grain cash returns

Dollars per planted acre

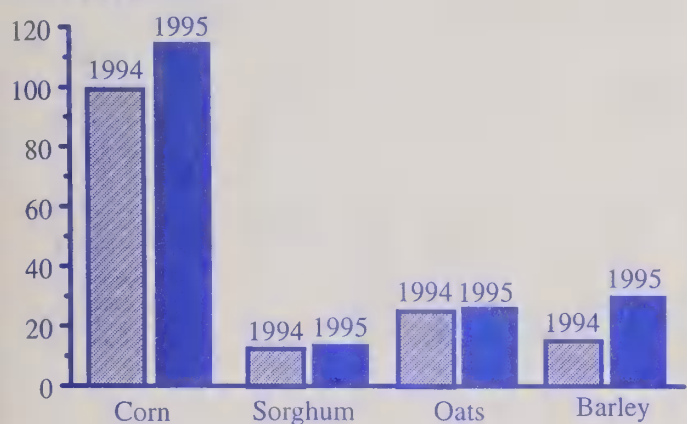
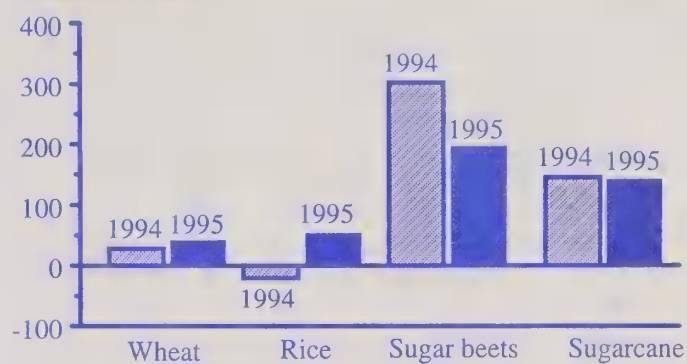


Figure 35 -- Food grain and sugar crop cash returns

Dollars per planted acre



Note: 1995 prices for sugar have been kept at the 1994 level. Sugarcane returns are per harvested acre.

Figure 36 -- Oilseed and cotton cash returns

Dollars per planted acre

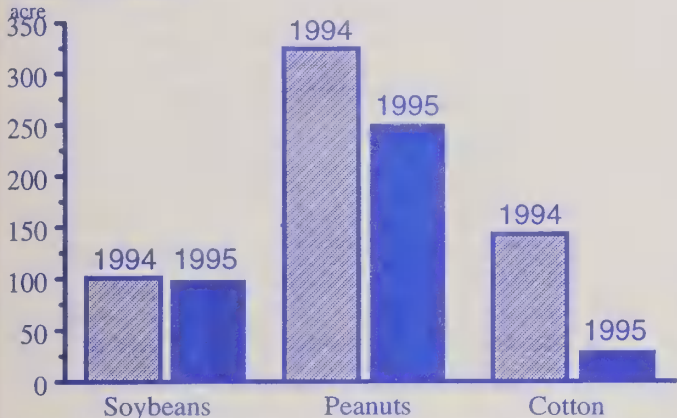


Figure 37 -- Hog cash returns

Dollars per cwt gain

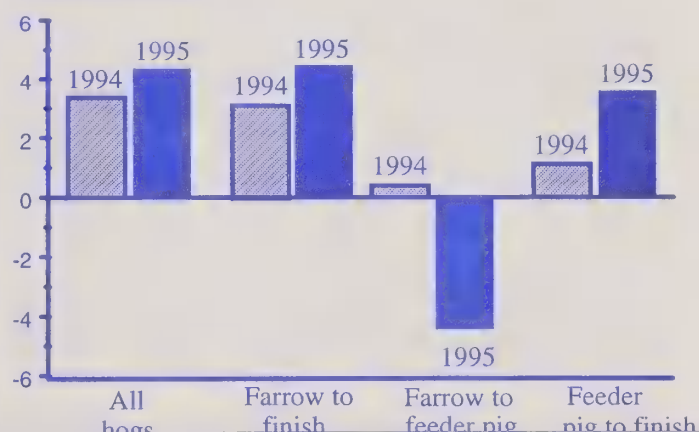


Figure 38 -- Cow-calf cash returns

Dollars per bred cow

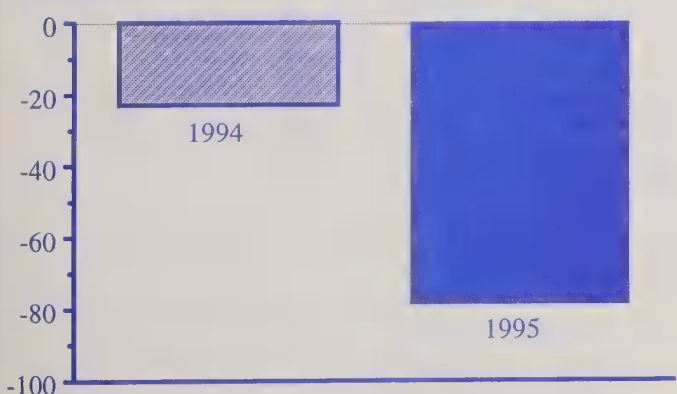
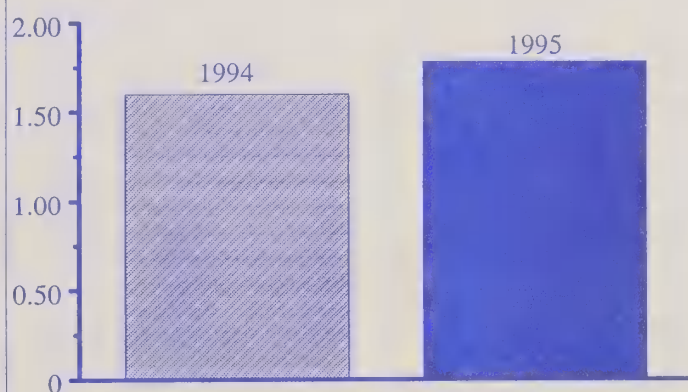


Figure 39 -- Milk cash returns

Dollars per cwt



A Slowing 1995 U.S. Economy Still Contributed To Rising Farm Costs

Despite the slowing of the U.S. economy in 1995, farm sales increased. However, factors underlying the slowdown contributed to rising farm costs.

The Fed's Tightening Had the Desired Effect, Slowing '95 Growth

Overall, the economy slowed in 1995, with real activity dropping 1.5 percentage points from 1994's healthy 3.5 percent growth. Consumption spending and residential investment were the primary contributors to the slowing, as both sectors were affected by the Federal Reserve Board's (the Fed) tighter monetary policy and private debt that was near record highs throughout 1995. Trade counterbalanced this weaker domestic demand, with export growth accelerating, while import growth slowed significantly. This movement in the international sector was anticipated because the value of the dollar declined from the second quarter of 1994 through mid-1995, and slowing U.S. domestic economic activity reduced import demand.

Despite the slowdown in the economy, employment expanded by nearly 2 million persons in 1995. At the same time, the average unemployment rate dropped to 5.6 percent, half a percentage point lower than 1994. With tighter labor markets, both real wage and real disposable income growth accelerated to 3.4 percent. Both of these labor market indicators were a percentage point above a year earlier. Real 1995 per capita disposable income grew somewhat slower at 2.6 percent, but was also a percentage point above 1994's level. At 5.6 percent unemployment, and with accelerating wage settlements, the Fed viewed the economy as being near full employment and felt the prospects for an uptick in inflation had increased.

High capacity utilization (at 83.0 percent in early 1994 and above 84.0 percent by late 1994-early 1995) reinforced Fed concerns about a rekindling of inflation, as did worries about a meaningful Federal budget deficit reduction that surfaced in early 1995. As a result, the Fed tightened monetary policy throughout 1994 and into the first half of 1995. The Federal Funds rate rose from an average 3.2-percent in the first quarter of 1994, to 6.0 percent in the second quarter of 1995, remaining just under 6.0 percent for the rest of the year. Short-term rates followed suit, with the 6-month Treasury-Bill rate (T-Bill) rising from 3.6 percent in the first-quarter of 1994 to 6.4 percent in first-quarter 1995, before dropping back to around 5.5 percent for the rest of 1995. The Prime rate and long-term interest rates generally followed this pattern as well, though long-term rate movements were more moderate. The Prime rate began rising from its first-quarter 1994 level of just over 6.0 percent, peaked at 9.0 percent in second-quarter 1995, and remained just under that level for the remainder of the year. The 10-year Treasury Bond yielded slightly over 6.5 percent in first-quarter 1994, reached just over 8.0 percent in the last quarter, and gradually declined to 6.3 percent at the end of 1995.

The Fed was plainly worried about future inflation and did its part in slowing demand, but actual inflation was, and remained, quite tame. Producer prices for finished goods rose a low 1.9-percent in 1995, following 1994's even lower 0.6 percent. Consumer price inflation was also modest, registering 2.9 and 2.4 percent in 1995 and 1994, respectively. Aside from the Fed's actions, unit-labor costs (ULC) played a very significant role in keeping inflation low. Since the recession in 1991, through 1994, ULC rose more slowly than the rate of inflation. In 1995, the rise in ULC exceeded the growth in prices by just 0.9 of a percent. This suggests that the economy has ample room for some upward movement in wages before cost-push becomes a cause for concern. But it should be noted that inflation can be demand driven as well. Capacity utilization rates, along with anecdotal evidence about bottlenecks in certain sectors, did indicate that this type of inflation, demand-pull inflation, was a growing possibility and explains the Fed's actions.

Rising Interest Rates Have Wide Ranging Impacts In the General Economy and the Farm Sector

Though interest rates moderated in later half 1995, the collective impact of their year-and-a-half rise was felt throughout the economy. Consumption growth slowed 0.8 percentage points, to 2.3 percent in 1995, though debt levels played a role as well. In particular, new car and light truck sales fell 3.1 percent in 1995, though admittedly off record 1994 sales. Residential investment had boomed in 1994, growing 10.8 percent. Higher interest rates not only raised costs to builders, but slowed housing demand well below anticipated levels, leaving builders with a very high inventory. As a result, residential investment contracted 2.3 percent in 1995.

By slowing U.S. domestic demand, interest rate movements indirectly affected imports. The near 13.0-percent drop in the dollar's value from first-quarter 1994 to second-quarter 1995 also had a significant impact. In all, U.S. real import growth in 1995, at 8.9 percent, was fairly strong, but, had slowed 4.6 percentage points from 1994's rate. Notably, the largest decelerations occurred in imports of industrial supplies and automobiles. Both of those categories registered real growth of 11.7 percent in 1994, while growing just 2.8 and 2.5 percent, respectively, in 1995.

The farm sector was also affected by rising interest rates and the resultant rise in interest expenses. Farm mortgage rates closely shadow the 10-Year Bond, while the Prime rate foreshadows interest charged for short-term operating loans. Additionally, variable-rate loans in the sector closely mirror movements in the 6-Month T-Bill. The farm interest rates reported here do tend to be less volatile than rates in

the general economy. This is true in part for technical reasons since rates are reported under the average cost of funds basis, reflecting the average yield on all outstanding loans. But it is true also because many rural banks depend on consumer deposits for loanable funds, and the interest rates they pay on those deposits are fairly stable. With a more stable cost of funds, these banks can afford more stable loan rates. Specifically, farm interest rates on nonreal estate loans moved from 1994's 8.9 percent, to 1995's 9.6 percent. Farm mortgage rates were essentially unchanged from 1994, hovering around 8.0 percent.

In a less directly identifiable way, the rural and agricultural banking system has reaped significant benefit from the macroeconomy. The long-lasting (20 of 21 quarters registered growth since the 1990-91 recession), noninflationary expansion has greatly contributed to stability and strengthening of the farm banking system and its ability to expand credit to farms. This has happened despite fluctuations in farm income and the inherent uncertainties that accompany farming.

Domestic Food Demand Slows, While a Weaker Dollar Boosts the Agricultural Economy

Even though per capita income growth accelerated to 2.5 percent in 1995, real growth in the domestic consumption of food and beverages slowed slightly to 1.9 percent. Despite slowing domestic demand, prices for finished consumer foods at both the producer level and the consumer level advanced nearly 2.0 percent and 3.0 percent, respectively in 1995. These price rises were in line with general inflation, but faster than those registered in 1994. This reinforces the notion that the rise in farm income was more of a price event, brought on by a poor crop year in 1995.

Though domestic demand was weak, significant support for farm earnings came from the international sector. Agricultural export sales reached a record \$55.8 billion in 1995, a rise of 22 percent and \$10.1 billion over then-record 1994 export sales. While low inflation in the agricultural sector helped keep U.S. agricultural goods competitive internationally, by far the biggest factor was the near 14-percent fall in the dollar's value from early 1994 through mid-1995. Normally, the dollar exchange rate responds to movements in interest rate differentials, particularly over the short-run. However, the dollar declined despite U.S. interest rates that generally rose relative to foreign rates. This conundrum is partially explained by net-capital inflows to the United States that exhibited some weakness in late 1994, and that were down more than 80.0 percent (on privately held asset movements) in 1995. These movements in capital flows were rooted overseas, where, for example, Japan's banks and economy were experiencing severe strains. Foreign economic activity also was a contributing factor to the surge in agricultural exports, but it was not a major force. Real world growth, excluding the U.S., reached a modest 2.5 percent in 1995 and was not much higher than the growth registered in 1994.

Increasing Oil Prices Help Push Up Costs

Oil prices rose significantly in 1995, helping to push up farm production expenses. The composite Refiners-Acquisition Price of crude oil averaged \$17.23 per barrel for

1995, 11.0 percent above 1994. At their 1995 peak of \$18.60 for May, oil prices were 16.0 percent above 1994 year-end levels. These increases should be most directly felt in fuel prices, and the Producer Price Index for refined petroleum products did register a 2.9-percent rise in 1995. Though such a movement appears modest, it does represent a 7.6-percentage point turnaround, as those same prices declined 4.7 percent in 1994. Crude oil prices impact fertilizer prices indirectly through their influence on natural gas markets. The National Agricultural Statistics Service's (NASS) Prices Paid Index for fertilizer was up 15.0 percent in 1995, and nitrogen prices rose 25 percent. Crude petroleum price movements have a more direct impact on pesticide prices, with agricultural chemical prices measured by NASS up 5.3 percent for 1995.

These price movements played a significant role in the near 8.0-percent rise in 1995 manufactured farm input expenses. Fertilizer, pesticides, and fuel, the components of manufactured farm input expenses, accounted for \$1.7 billion of the \$8.2 billion upturn in total farm production expenses.

First-Half 1996 in Review

First-half 1996 growth was significantly stronger than 1995, registering annual rate growth of 2.0 percent in the first quarter and 4.2 percent in the second. The sectors that were responsible for 1995's slower growth were the sectors responsible for the rebound in early 1996. Consumption grew around 3.5 percent in both quarters, on improved consumer confidence, greater job growth, strong disposable income growth in later 1995, and somewhat lower short-term interest rates. Somewhat surprisingly, residential investment also proved strong in the first half. Long-term interest rates did show some downward drift, but not enough to explain the 7.4 and 15.1 percent expansion in the first and second quarters, respectively. Frequently, home purchasers sitting on the fence will be pushed into action when they perceive interest rates to be on an upward swing, and that appears to be the case in this instance.

Interest rates were down modestly, with the Fed loosening money policy slightly off weaker 1995 growth and inflation that remained in check. The Federal Funds rate was down some 50 basis points from fourth-quarter 1995 through second-quarter 1996. Other short-term rates mirrored the Federal Funds rate, with the Prime rate down just under 50 basis points over the same period, and the T-Bill rate down 14 basis points. The 10-year Treasury Bond bucked this trend, rising 44 basis points, as long-term markets did not reflect lower inflationary expectations.

Internationally, the dollar rebounded about 4.0 percent over the first 2 quarters of 1996. Foreign exchange markets appear to be anticipating an upturn in later half 1996 U.S. interest rates, as well as acknowledging that the dollar may be modestly undervalued after depreciating in 1995. Oil prices continued their upward movement in the first half of 1996, reaching \$21.60 per barrel in April and averaging \$19.46.

Later Half 1996

Second-half GDP growth will be slower, with overall 1996 growth slightly above 2.5 percent. Producer and consumer

price inflation should accelerate somewhat, with yearly averages between 2.5 percent and 3.0 percent. Domestic interest rates should average slightly less in 1996 than in 1995, even as they increase in late 1996 responding to tightening labor markets and a slight ratchet up of inflation. Still, with inflation relatively low, real U.S. interest rates were comparatively attractive, bringing a stronger dollar. The improved growth in Japan and Mexico and the sharp pickup in Canadian second-half growth, with good Asian growth, will more than offset the slowdown in European growth in 1996. Crude oil prices rose 12 percent compared with 1995. Natural gas rose 25 percent in 1996.

Overall, the U.S. and world economy will be only mildly supportive of the farm financial condition in 1996. The picture on expenses is mixed. Higher oil and natural gas

prices will induce increases in direct energy and fertilizer prices. The low interest rates of early 1996 will make interest expenses lower than in 1995. The higher minimum wage will marginally raise labor costs. Other raw and industrial materials used in farming have, on the whole, seen below average price increases.

Even though the dollar is stronger than in 1995, it is only about as strong as it was in 1994. While the overall foreign growth rate did not change from 1995, our major agricultural export customers, as a whole, grew faster in 1996. Overall, the world economy supported strong U.S. farm export growth.

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Farm Income Forecast for 1996 Above Previous 5-Year Average

Crop receipts forecast to be a record. Livestock receipts are forecast to increase, but cattle receipts could be the lowest in the 1990's.

Farm Income in 1996 Expected To Be Up Considerably from 1995

The 1996 net cash income forecast of \$58 billion and net farm income forecast of \$51 billion represents substantial increases over 1995. For perspective, during the 1990's net cash income has averaged \$53 billion while net farm income averaged \$43 billion. For historical farm income numbers and 1996 forecasts see appendix tables 1 and 3.

Strong crop receipts are a major reason for the expected higher income. Tight worldwide grain supplies have kept grain prices high while U.S. production of corn, wheat, and soybeans is expected to be larger than last year. At the same time, vegetable, fruit, and greenhouse receipts should continue their steady increase. Overall, livestock receipts are expected to be up but many cattle producers may not share in the bounty. Receipts for hogs and poultry should increase compared with 1995 and dairy producers may have a particularly strong increase in their receipts. The increase in dairy receipts will be almost entirely due to higher prices rather than higher production. Financial problems may continue for beef producers - cattle receipts are forecast to be the lowest in the 1990's. For historical crop and livestock cash receipts and 1996 forecasts see appendix table 4.

More crop acres and continued heavy livestock production should contribute to higher 1996 expenses. Fertilizer and fuel prices were high during the planting season. On the other hand, interest rates continue to be moderate, which should leave 1996 interest expenses close to the 1995 level. For historical information on farm expenses and 1996 forecasts see appendix table 5.

Farm Asset Growth Continues

The value of U.S. agricultural assets (excluding operator households) on December 31, 1996 is forecast at \$1,012 billion, up 4.2 percent from 1995. About 77 percent of the increase is due to rising real estate values. Expanding cash receipts and returns to farm assets, and favorable interest rates are stimulating continued growth in farm sector investments.

The Economic Research Services's (ERS) year-end estimates of farm business real estate assets are now based on USDA's June Agricultural Survey, conducted in the summer following the accounting year. Because the final December 31, 1995 farm business real estate estimates are not yet available, the December 31, 1995 estimate is preliminary, while the December 31, 1996 estimate is a forecast.

ERS uses economic models that forecast farmland values based upon expected farm income and interest rates

charged on real estate loans. Farmland value indicators from other sources, such as the land value assessments provided by District Federal Reserve Banks, are also considered. The September 1996 estimate of the value of 1996 farm business real estate assets is a bit higher than the June 1996 estimate as recent data indicate stronger growth in farmland values, particularly in the Midwest.

Nonreal estate assets are expected to increase about \$9 billion in 1996. Livestock and poultry values in 1996 are expected to rise after falling by nearly \$13 billion in 1995. The \$13-billion drop in 1995 livestock and poultry values was primarily due to an \$8-billion drop in the value of cattle and calf inventories. The number of cattle and calves on inventory increased by 1 percent in 1995, but the average value per head fell by over 19 percent. The value of crops stored and purchased inputs on hand are expected to rise in 1996 after dropping in 1995. The value of machinery and equipment is forecast to rise about \$2 billion, in part due to favorable credit conditions.

Farm Debt Expected To Rise Again in 1996

Total debt is projected to rise another \$4 billion in 1996. The impact of this continuing increase in debt on farm incomes will be moderated by the combined effects of relatively high 1996 prices and generally favorable interest rates.

Taken together, these factors indicate that indebted farm operators will have adequate income available to meet principal and interest payments on their loans. Improving incomes and more favorable interest rates in 1996 suggest that farm operations could afford to service higher debt levels, but the decline in debt repayment capacity utilization, from 58 percent in 1995 to a projected 52 percent in 1996, reflects farmers restraint in taking on new debt. There is no evidence that growing debt levels in 1996 will precipitate widespread financial stress in the sector.

Farmers realize that they probably face substantial reductions in Government support levels once the transition payment period ends. Farmers also recognize that prices for many commodities will probably not maintain current lofty levels indefinitely. Therefore, farmers appear to be taking advantage of current high income levels to improve their operations' balance sheets, rather than leveraging the favorable income levels to acquire additional resources through debt-financed expansion.

While nonreal estate debt is expected to increase about 3 percent in 1996, the early season demand for production credit was less robust than many had projected. Farmers who benefitted from 1995's general price rise may have

had adequate cash available to begin the 1996 season without drawing on operating credit lines.

Financial Ratios Forecast for 1996 Suggest Gains Over 1995

Rising farm sector asset and equity values and growing returns to farm assets and equity, could lead to higher rates of return on farm assets and equity in 1996. Forecast rates of return on farm assets and equity from current income are expected to be considerably higher than in 1995. Total returns to farm assets, including returns from real capital gains, are forecast to be 3.9 percent, compared with 2.6 percent in 1995. On average, rates of return on farm sector investments in 1996 are higher than in 1995.

The debt-to-asset ratio measures debt pledged against farm business assets, indicating overall financial solvency. The debt-to-asset ratio is forecast to be 15.3 percent in 1996, and is estimated to be at 15.5 percent in 1995. For the farm sector as a whole, solvency indicators remain favorable.

Net cash flow expands on net cash income to account for both internal and external sources of funds, and thus provides a broader indication of the resources available to farm businesses to invest in the sector, and to meet current debt obligations. As farm debt and interest expenses have fallen since the end of the "farm financial crisis" of 1980-86, the ratio of debt-to-net cash flow (after interest payments) of 2.3 in 1993 was below the pre-boom 1970-74 average of 2.4 (fig. 40). However, this ratio rose to nearly 3.0 in 1994 and 1995 as debt levels rose and growth in net cash flow moderated. The debt-to-net cash flow ratio is forecast to be 2.8 in 1996.

Net Cash Flow Is Defined as Follows:

Net cash flow (after interest expenses) = net cash income

+ change in loans outstanding

+ net change in other financial assets

+ net rent to nonoperator landlords

(excluding capital consumption)

- capital expenditures

(excluding operator dwellings)

- interest expenses

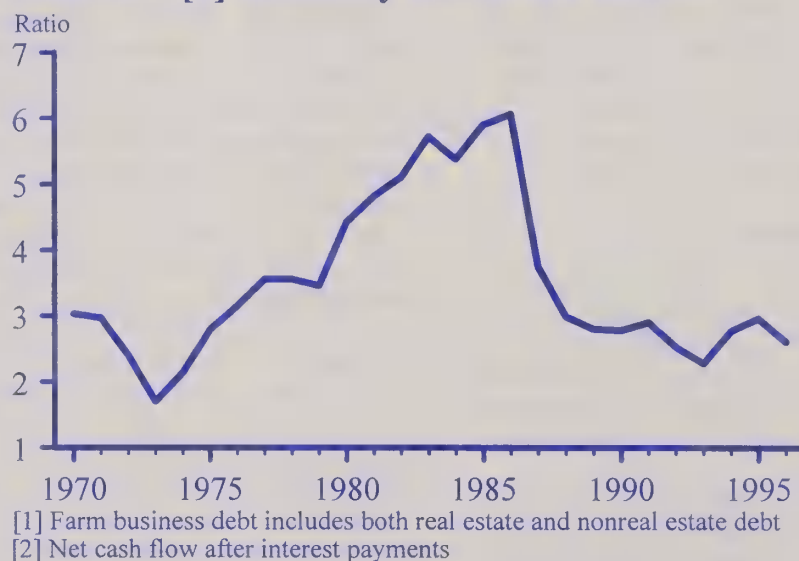
(excluding operator dwellings)

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Figure 40 -- Ratio of farm debt [1] to net cash flow [2] relatively low in the 1990's



ERS Income Forecasts Will No Longer Be Published As Ranges

ERS publishes seven forecasts of farm income for a given year before publishing the first official estimate. The December 1996 issue of this publication will include the first 1997 farm income forecast; the September 1998 issue will include the final 1997 farm income estimate.

Starting with this issue, ERS will publish its farm sector income forecasts as numbers instead of ranges. This change will make it easier to compare forecasts with historical data and gauge possible changes in farm sector financial conditions. However, farm income forecasts are no more certain now than in the past. In the June issue of this publication, for instance, ERS presented the 1996 net farm income forecast as a range of \$45-\$55 billion. That \$10 billion range pointed out that in the middle of 1996 much could yet happen to change the farm income outlook.

In the absence of the ranges, table 8 will help forecast users understand how forecasts may differ from final estimates. For 1991-95, the table shows the average difference in each of the seven forecasts and the first official estimate. To illustrate, the seventh net farm income forecast was on average \$2 billion different than the first official estimate. The averages in the table consider only the absolute amount of the difference - not whether the forecast was higher or lower than the final estimate.

Table 8 -- The seventh net farm income forecast was on average \$2 billion different from the final estimate in 1990-95

Item forecast:	Average difference in \$ Billion between forecast and final estimate for forecast number:						
	1	2	3	4	5	6	7
Crop receipts	3.4	3.3	3.2	2.3	1.8	0.7	0.9
Livestock receipts	2.6	2.0	1.8	1.4	0.6	1.9	0.3
Government payments	1.8	1.5	1.0	0.8	1.1	0.8	0.2
Farm related income	1.5	1.5	1.1	1.2	1.1	1.1	1.1
Gross cash income	6.2	5.9	4.6	3.3	3.2	4.3	1.6
Cash expenses	8.8	8.4	7.4	5.1	4.7	5.2	3.3
Net cash income	3.3	4.2	4.2	2.7	1.5	3.2	2.5
Nonmoney income	1.4	1.5	1.4	0.9	0.7	0.7	0.6
Inventory adjustment	2.2	2.6	2.9	2.2	1.5	1.2	0.6
Total gross income	8.2	7.8	5.1	3.7	3.9	5.0	2.4
Total expenses	8.7	8.3	7.1	4.8	4.9	5.4	3.9
Net farm income	3.3	3.9	5.3	3.2	1.9	4.0	2.0

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Appendix table 1--Farm income statements, 1991-96

	1991	1992	1993	1994	1995	1996F
<i>Billion dollars</i>						
Cash income:						
1. Cash receipts	167.9	171.3	177.6	180.8	185.8	200.2
Crops ¹	82.1	85.7	87.5	92.6	98.9	107.7
Livestock	85.8	85.6	90.2	88.1	86.8	92.5
2. Direct Government payments	8.2	9.2	13.4	7.9	7.3	8.6
3. Farm-related income ²	8.2	8.2	9.1	9.2	10.9	10.9
4. Gross cash income (1+2+3)	184.3	188.7	200.1	197.8	203.9	219.6
5. Cash expenses ³	134.0	133.2	141.2	147.4	155.1	161.6
6. NET CASH INCOME (4-5)	50.3	55.5	58.9	50.5	48.8	58.0
Farm income:						
7. Gross cash income (1+2+3)	184.3	188.7	200.1	197.8	203.9	219.6
8. Nonmoney income ⁴	7.8	7.7	8.5	9.8	9.9	10.2
9. Inventory adjustment	-0.2	4.2	-4.5	8.2	-3.4	3.4
10. Total gross income (7+8+9)	191.9	200.6	204.2	215.8	210.4	233.2
11. Total expenses	153.3	152.5	160.5	167.4	175.6	182.4
12. NET FARM INCOME (10-11)	38.5	48.0	43.6	48.4	34.8	50.8

F = forecast. Totals may not add due to rounding.

¹ Includes payments received from CCC for placements of crops under nonrecourse loans.

² Income from machine hire and customwork, forest product sales, custom feeding service fees, and other farm sources.

³ Excludes expenses for onfarm operator dwellings and noncash items such as capital consumption and perquisites to hired labor.

⁴ Includes the value of home consumption of farm products plus imputed rental value of operator dwellings.

Appendix table 2--Average income to farm operator households, 1991-96

Item	1991	1992	1993	1994 ¹	1995	1996F
<i>Dollars per operator household</i>						
Farm operator household income	37,447	42,911	40,223	42,469	44,392	46,322
Income to the household from farming ²	5,810	7,180	4,815	4,376	4,720	5,436
Self-employment farm income	4,458	5,172	3,623	3,407	4,059	n/a
Other farm income to household	1,352	2,008	1,192	970	661	n/a
Income from off-farm sources	31,638	35,731	35,408	38,092	39,671	40,886
From wages, salaries, and non-farm businesses	23,551	27,022	25,215	28,750	29,262	n/a
From interest, dividends, transfer payments, etc. ³	8,087	8,709	10,194	9,342	10,409	n/a

F = forecast n/a = not available.

¹ Estimates beginning in 1994 incorporate changes in the procedure for imputing refusals to survey questions about off-farm income. Also, income from the sale of breeding stock is no longer included in cash farm income, if breeding stock is purchased and depreciation for breeding stock is reported.

² Income to the household from farming equals farm operator self-employment income plus amounts that operators pay family members to work on the farm, income from renting out farmland, and net income from any farm business other than the one being surveyed. In 1993 and 1994, income from renting out farmland is excluded from income to the household from farming.

³ In 1993 and 1994, this category includes income from renting out farmland.

For information on household income contact: Bob Hoppe (202) 501-8308 Email rhoppe@econ.ag.gov.

Appendix table 3--Relationship of net cash to net farm income, 1991-96

Item	1991	1992	1993	1994	1995	1996F
<i>Billion Dollars</i>						
Gross cash income	184.3	188.7	200.1	197.8	203.9	219.6
Minus cash expenses	134.0	133.2	141.2	147.4	155.1	161.6
Equals net cash income	50.3	55.5	58.9	50.5	48.8	58.0
Plus nonmoney income ¹	7.8	7.7	8.5	9.8	9.9	10.2
Plus value of inventory change	-0.2	4.2	-4.5	8.2	-3.4	3.4
Minus noncash expenses	15.4	15.2	15.2	15.4	15.7	16.4
Labor perquisites	0.5	0.5	0.4	0.4	0.6	0.6
Net capital consumption	14.9	14.7	14.8	15.0	15.1	15.8
Capital consumption exc. dwellings	16.3	16.1	16.2	16.4	16.5	17.3
- Landlord capital consumption	1.4	1.4	1.4	1.4	1.4	1.5
Minus operator dwelling expenses	3.8	4.1	4.1	4.6	4.8	4.3
Capital consumption	1.9	2.2	2.2	2.4	2.6	2.3
Interest	0.4	0.4	0.4	0.4	0.4	0.5
Property taxes	0.6	0.6	0.7	0.8	0.9	0.7
Repair and maintenance	0.7	0.6	0.5	0.6	0.5	0.5
Insurance	0.3	0.3	0.3	0.4	0.4	0.2
Equals net farm income	38.5	48.0	43.6	48.4	34.8	50.8

F = forecast.

¹ The value of home consumption and gross rental value of all dwellings.

Appendix table 4--Cash receipts, 1991-96

Item	1991	1992	1993	1994	1995	1996F
<i>Billion dollars</i>						
Crop receipts ¹	82.1	85.7	87.5	92.6	98.9	107.7
Food grains	7.3	8.5	8.2	9.5	10.1	11.4
Wheat	6.3	7.2	7.5	7.9	8.8	9.6
Rice	1.0	1.3	0.7	1.7	1.3	1.8
Feed grains and hay	19.3	20.1	20.2	20.3	23.1	28.2
Corn	14.4	14.7	14.6	14.7	17.4	21.4
Sorghum, barley, and oats	2.1	2.3	2.0	2.0	2.1	3.0
Oil crops	12.7	13.3	13.2	14.7	14.8	17.8
Soybeans	11.0	11.6	11.8	12.8	13.2	16.3
Peanuts	1.4	1.3	1.0	1.2	1.0	0.9
Cotton lint and seed	5.2	5.2	5.2	6.7	7.6	6.6
Tobacco	2.9	3.0	2.9	2.6	2.6	2.8
Fruits and nuts	9.9	10.2	10.3	10.2	10.8	10.8
Vegetables	11.6	11.9	13.5	13.7	14.8	14.4
Greenhouse & nursery	9.0	9.3	9.6	10.0	10.4	10.7
Livestock receipts ²	85.8	85.6	90.2	88.1	86.8	92.5
Red meats	50.1	47.7	50.8	46.8	44.6	44.6
Cattle and calves	38.7	37.3	39.4	36.4	34.0	32.0
Hogs	11.0	10.0	10.9	9.9	10.1	12.1
Sheep and lambs	0.4	0.5	0.6	0.5	0.6	0.5
Poultry and eggs	15.2	15.5	17.3	18.4	19.1	21.2
Broilers	8.4	9.2	10.4	11.4	11.8	13.1
Turkeys	2.4	2.4	2.5	2.6	2.8	3.0
Eggs	3.9	3.4	3.8	3.8	4.0	4.4
Dairy products	18.0	19.7	19.2	19.9	19.9	23.5
TOTAL RECEIPTS	167.9	171.3	177.6	180.8	185.8	200.2

F = forecast. Totals may not add due to rounding.

¹ Includes sugar, seed, and other miscellaneous crops.

² Includes miscellaneous livestock and livestock products.

Appendix table 5--Farm production expenses, 1991-96

Item	1991	1992	1993	1994	1995	1996F
<i>Billion dollars</i>						
Farm-origin	38.6	38.6	41.2	41.3	42.5	44.6
Feed purchased	19.3	20.1	21.4	22.6	24.5	27.3
Livestock and poultry purchased	14.1	13.4	14.6	13.2	12.6	11.4
Seed purchased	5.1	4.9	5.2	5.4	5.5	6.0
Manufactured inputs	20.6	20.1	20.5	21.7	23.4	25.4
Fertilizer and lime	8.7	8.3	8.4	9.2	10.0	10.7
Pesticides	6.3	6.5	6.7	7.2	7.7	8.3
Petroleum fuel and oils	5.6	5.3	5.3	5.3	5.7	6.4
Interest	12.1	11.2	10.8	11.8	12.8	12.5
Nonreal estate	6.1	5.4	5.3	6.0	6.7	6.6
Real estate	6.0	5.8	5.5	5.9	6.1	5.9
Other operating expenses	48.0	47.3	52.4	55.7	60.0	61.8
Repair and maintenance	8.6	8.5	9.2	9.2	9.4	9.9
Machine hire and customwork	3.5	3.8	4.4	4.8	4.8	5.0
Marketing, storage & transportation	4.7	4.5	5.6	6.7	7.2	7.3
Labor	13.9	14.0	15.0	15.3	16.3	16.9
Miscellaneous	17.3	16.5	18.2	19.7	22.3	22.7
Other overhead expenses	34.0	35.3	35.6	37.0	36.9	38.1
Capital consumption	18.2	18.3	18.4	18.8	19.1	19.6
Property taxes	5.9	6.2	6.3	6.7	6.9	7.1
Net rent to nonoperator landlords	9.9	10.8	10.9	11.5	10.9	11.4
Total production expenses	153.3	152.5	160.5	167.4	175.6	182.4
Noncash expenses	15.4	15.2	15.2	15.4	15.7	16.4
Labor perquisites	0.5	0.5	0.4	0.4	0.6	0.6
Net capital consumption	14.9	14.7	14.8	15.0	15.1	15.8
Capital consumption exc. dwellings	16.3	16.1	16.2	16.4	16.5	17.3
- Landlord capital consumption	1.4	1.4	1.4	1.4	1.4	1.5
Operator dwelling expenses	3.8	4.1	4.1	4.6	4.8	4.3
Capital consumption	1.9	2.2	2.2	2.4	2.6	2.3
Interest	0.4	0.4	0.4	0.4	0.4	0.5
Property taxes	0.6	0.6	0.7	0.8	0.9	0.7
Repair and maintenance	0.7	0.6	0.5	0.6	0.5	0.5
Insurance	0.3	0.3	0.3	0.4	0.4	0.2
Cash expenses ¹	134.0	133.2	141.2	147.4	155.1	161.6

F = forecast.

¹ Total production expenses minus noncash and onfarm operator dwelling expenses.

Appendix table 6 – Farm business balance sheet, 1991-96F

Item	1991	1992	1993	1994	1995P	1996F
Billion dollars						
Farm assets	842.4	870.4	907.2	937.8	971.6	1,012.0
Real estate	624.4	642.8	673.7	706.1	755.5	786.5
Livestock and poultry	68.1	71.0	72.8	67.9	54.7	60.0
Machinery and motor vehicles	85.9	85.5	86.7	87.9	86.9	89.0
Crops stored ¹	22.2	24.2	23.3	23.1	25.1	25.0
Purchased inputs	2.7	3.9	4.2	5.0	3.4	4.5
Financial assets	40.6	43.1	46.6	47.8	45.9	47.0
Farm debt	139.2	139.0	141.9	146.7	150.6	155.0
Real estate ²	74.9	75.4	76.0	77.6	79.1	81.0
Nonreal estate	64.3	63.6	65.9	69.1	71.5	74.0
Farm equity	703.2	731.4	765.3	791.1	821.0	857.0

P= preliminary, F = forecast.

¹ Non-CCC crops held on farm plus value above loan rate for crops held under CCC.

² Includes CCC storage and drying facility loans.

Appendix table 7 -- Farm sector rates of return, 1991-96F

Item	1991	1992	1993	1994	1995P	1996F
	Percent					
Rate of return on assets	3.1	4.1	2.9	3.6	2.6	3.9
Real capital gains on assets	-1.9	0.4	2.3	1.3	3.5	0.9
Total real return on assets ¹	1.2	4.5	5.3	4.9	6.1	4.8
Average interest rate paid on debt	8.4	7.8	7.3	7.7	8.2	7.7
Real capital gains on debt	3.6	2.7	2.1	2.0	3.4	3.5
Real cost of debt ²	4.6	5.0	5.2	5.7	4.7	4.8
Rate of return on equity	2.0	3.4	2.1	4.9	1.4	3.1
Real capital gains on equity	-1.5	1.0	3.1	1.9	4.6	1.5
Total real return on equity ³	0.5	4.4	5.3	4.8	6.0	4.6
Real net return on assets financed by debt ⁴	-3.5	-0.4	0.0	-0.7	1.3	0.6

P= preliminary. F = forecast. Numbers may not add due to rounding.

¹ Rate of return on assets from current income plus rate of return from real capital gains.

² Average interest rate paid on farm debt minus real capital gains on debt.

³ Rate of return on equity plus rate of return from real capital gains.

⁴ Total real return on farm assets minus the real cost of debt. When the total real rate of return on assets exceeds the total real cost of farm debt, debt financing is advantageous.

Appendix table B -- Farm financial measures: 1991-96

Ratios	1991	1992	1993	1994	1995P	1996F
Ratio						
Liquidity ratios:						
Farm business debt service coverage ¹	2.21	2.43	2.56	2.18	2.01	2.3
Debt servicing ²	0.15	0.14	0.14	0.14	0.15	0.1
Times interest earned ratio ³	4.68	5.86	5.61	5.66	4.27	5.6
Percent						
Solvency ratios:						
Debt/asset ⁴	16.5	15.9	15.6	15.6	15.5	15.3
Debt/equity ⁵	19.7	18.9	18.5	18.6	18.3	18.1
Profitability ratios:						
Return on equity ⁶	2.0	3.4	2.1	2.9	1.4	3.1
Return on assets ⁷	3.1	4.1	2.9	3.6	2.6	3.9
Financial efficiency ratios:						
Gross ratio ⁸	72.7	70.6	70.6	74.5	76.1	73.6
Interest to gross cash farm income ⁹	6.4	5.7	5.2	5.8	6.0	5.4
Asset turnover ¹⁰	21.9	22.0	22.5	21.4	21.4	22.1
Net cash farm income to debt ratio ¹¹	44.7	47.5	48.7	42.2	41.1	45.8

P= preliminary. F = forecast.

¹ Assesses the ability of farm businesses to repay interest and principal associated with farm business debt from net cash farm income. Higher values indicate a better cash position.

² Indicates the proportion of gross cash farm income needed to service debt. Lower values indicate a relatively better cash position.

³ Focuses on the ability to meet interest payments out of net farm income. A higher value of the times interest-earned ratio indicates that net farm income covers more interest expense and that operator equity is less exposed to risk.

⁴ Indicates the relative dependence of farm businesses on debt and their ability to use additional credit without impairing their risk-bearing ability.

⁵ Measures the relative proportion of funds provided by creditors (debt) and owners (equity).

⁶ Measures the per dollar returns to equity capital employed in the farm business from current income.

⁷ Measures the per dollar return to farm assets from current income.

⁸ Gives the proportion of gross cash farm income absorbed by cash production expenses. The higher the value of the ratio, the less efficient the farm sector is considered to be.

⁹ Gives the proportion of gross farm revenue absorbed by interest payments. Higher values indicate a relatively fixed expense structure and less flexibility in meeting expenses as they arise.

¹⁰ Measures the gross cash farm income generated per dollar of farm assets. The higher the value of the ratio relative to similar sized operations, the more efficiently the farm business uses its assets.

¹¹ Reflects the strain placed on cash-flow to retire debt. The lower the value, the greater the stress placed on cash income to retire farm debt on schedule.

Appendix table 9 -- Farm marketings, 1994 and 1995, government payments, 1995 and principal commodities, 1995, by state

State	Farm marketings, 1995			Farm marketings, 1994			Livestock and products	1995 Government Payments	1995 State rank for total farm marketings, four principal commodities in order of marketing receipts, and percentage of total marketings
	Total	Crops	Livestock and products	Total	Crops	Livestock and products			
	1,000 dollars								
ALABAMA	2,951,334	801,784	2,149,550	2,908,347	740,772	2,167,575	53,386	26-Broilers, cattle/calves, chickens, cotton(75%)	
ALASKA	27,935	21,890	6,045	30,119	24,380	5,739	1,735	50-Greenhouse, potatoes, hay, dairy prod(80%)	
ARIZONA	1,853,669	1,049,326	804,343	2,256,444	1,446,126	810,318	9,501	29-Lettuce, cattle/calves, cotton, dairy prod(70%)	
ARKANSAS	5,394,516	2,249,765	3,144,751	5,065,456	2,042,233	3,023,223	383,265	13-Broilers, cotton, soybeans, rice(69%)	
CALIFORNIA	21,281,547	15,792,837	5,488,710	22,261,109	16,712,582	5,548,527	237,760	1-Dairy prod, greenhouse, grapes, cotton(38%)	
COLORADO	4,051,357	1,287,188	2,764,169	3,984,525	1,360,834	2,623,691	167,053	17-Cattle/calves, wheat, corn, dairy prod(74%)	
CONNECTICUT	477,791	224,242	253,549	484,490	227,679	256,811	2,382	41-Greenhouse, chicken eggs, dairyprod, aquaculture(68%)	
DELAWARE	657,594	152,222	505,372	675,613	159,124	516,489	3,109	40-Broilers soybeans, greenhouse, corn(82%)	
FLORIDA	5,984,249	4,792,116	1,192,133	5,848,907	4,719,097	1,129,810	55,716	9-Oranges greenhouse, sugar, tomatoes(53%)	
GEORGIA	4,688,737	2,017,742	2,670,995	5,166,101	2,376,917	2,789,184	66,466	14-Broilers, cotton, peanuts, chicken eggs, (63%)	
HAWAII	507,609	430,788	76,821	483,468	411,656	71,812	947	42-Sugar, pineapples, greenhouse, nuts(66%)	
IDAHO	2,955,215	1,756,147	1,199,068	3,166,248	1,945,204	1,221,044	89,536	22-Potatoes, cattle/calves, dairy prod, wheat(70%)	
ILLINOIS	7,945,732	5,896,508	2,049,224	7,887,034	6,176,908	1,710,126	543,735	5-Corn, soybeans, hogs, cattle/calves(85%)	
INDIANA	4,664,044	2,930,321	1,733,723	4,981,458	3,240,106	1,741,352	246,066	14-Corn, soybeans, hogs, dairy prod(76%)	
IOWA	9,999,410	4,769,337	5,230,073	10,958,874	5,891,122	5,067,752	784,639	3-Corn, soybeans hogs, dairy prod(76%)	
KANSAS	7,626,389	2,868,415	4,757,974	7,521,311	2,828,527	4,692,784	423,021	6-Cattle/calves, wheat, corn, grain sorghum (86%)	
KENTUCKY	3,220,241	1,571,305	1,648,936	3,059,463	1,443,913	1,615,550	67,373	25-Tobacco, horses/mules, cattle, corn(67%)	
LOUISIANA	2,028,702	1,329,095	699,607	2,024,862	1,395,025	629,837	157,315	32-Cotton, sugar cane, rice, soybeans(57%)	
MAINE	457,905	187,744	270,161	479,230	198,159	281,071	14,080	43-Chicken eggs, potatoes, dairy prod, aquaculture(74%)	
MARYLAND	1,339,209	540,508	798,701	1,402,319	571,829	830,490	15,147	36-Broilers, greenhouse, dairy prod, soybeans(67%)	
MASSACHUSETTS	459,517	342,080	117,437	430,377	327,055	103,322	2,458	45-Greenhouse, cranberries, dairy prod, christmas trees(66%)	
MICHIGAN	3,381,239	1,992,076	1,389,163	3,520,756	2,196,837	1,323,919	151,009	20-Dairy prod, greenhouse, corn, soybeans,(54%)	
MINNESOTA	6,407,645	2,959,643	3,448,002	7,001,667	3,550,943	3,450,724	467,901	7-Corn, dairy prod, soybeans, hogs(63%)	
MISSISSIPPI	2,870,975	1,180,604	1,690,371	3,126,153	1,441,265	1,684,888	129,161	24-Broilers, cotton, soybeans, aquaculture(75%)	
MISSOURI	4,561,575	2,098,225	2,463,350	4,399,227	2,133,772	2,265,455	255,996	16-Soybeans, cattle/calves, hogs, corn(59%)	
MONTANA	1,884,628	1,028,968	855,660	1,845,168	1,047,254	797,914	185,331	33-Wheat, cattle/calves, barley, hay (86%)	
NEBRASKA	8,524,549	3,119,834	5,404,715	8,690,446	3,503,152	5,187,294	507,347	4-Cattle/calves, corn, hogs, soybeans (87%)	
NEVADA	299,221	109,588	189,633	285,614	122,042	163,572	4,265	47-Cattle/calves, hay, dairy prod, potatoes (83%)	
NEW HAMPSHIRE	150,955	87,453	63,502	152,167	88,150	64,017	1,183	48-Dairy products, greenhouse, apples, christmas trees(65%)	
NEW JERSEY	769,991	589,332	180,659	773,151	572,673	200,478	5,492	38-Greenhouse, dairy prod, eggs, fresh tomatoes(46%)	
NEW MEXICO	1,527,909	426,365	1,101,544	1,415,176	451,786	963,390	55,158	35-Cattle/calves, dairy prod, hay, pecans (74%)	
NEW YORK	2,867,681	979,338	1,888,343	2,877,474	1,012,139	1,865,335	43,488	27-Dairy prod, greenhouse, cattle/calves, apples(71%)	
NORTH CAROLINA	6,439,341	3,110,371	3,328,970	6,986,814	3,251,476	3,735,338	40,159	8-Hogs, broilers, tobacco, greenhouse(62%)	
NORTH DAKOTA	3,028,022	2,403,427	624,595	3,153,765	2,588,112	565,653	296,202	23-Wheat, cattle/calves, barley, sunflower(70%)	
OHIO	4,438,388	2,874,796	1,563,592	4,576,009	2,986,816	1,589,193	167,307	15-Soybeans, corn, dairy prod, greenhouse(65%)	
OKLAHOMA	3,898,466	1,199,059	2,699,407	3,704,737	1,133,469	2,571,268	164,674	19-Cattle/calves, wheat, broilers, greenhouse (75%)	
OREGON	2,650,706	1,929,627	721,079	2,719,992	2,054,775	665,217	52,050	28-Greenhouse, cattle/calves, greenhouse, mushrooms(64%)	
PENNSYLVANIA	3,769,178	1,164,194	2,604,984	3,738,250	1,186,204	2,552,046	41,055	18-Dairy prod, cattle/calves, greenhouse, chicken eggs, sweet corn(73%)	
RHODE ISLAND	80,422	68,335	12,087	80,059	70,051	10,008	318	49-Greenhouse, dairy prod, chicken eggs, sweet corn(73%)	
SOUTH CAROLINA	1,383,281	768,243	615,038	1,441,296	830,313	610,983	33,782	34-Broilers, tobacco, greenhouse, cotton(50%)	
SOUTH DAKOTA	3,335,563	1,633,924	1,701,639	3,383,637	1,707,340	1,676,297	245,035	21-Cattle/calves, corn, soybeans, wheat(70%)	
TENNESSEE	2,171,600	1,199,891	971,709	2,126,727	1,258,284	868,443	47,338	31-Cattle/calves, cotton, dairy prod, tobacco(51%)	
TEXAS	12,929,651	4,817,398	8,112,253	13,287,680	4,833,844	8,453,836	642,878	2-Cattle/calves, cotton, greenhouse, dairy prod(72%)	
UTAH	826,942	229,841	597,101	815,400	222,957	592,443	24,507	37-Cattle/calves, dairy prod, hay, greenhouse(69%)	
VERMONT	478,746	88,642	390,104	472,314	92,277	380,037	4,322	44-Dairy products, cattle/calves, greenhouse, hay(87%)	
VIRGINIA	2,194,166	784,735	1,409,431	2,248,012	854,832	1,393,180	25,993	30-Broilers, dairy prod, cattle/calves, turkeys(50%)	
WASHINGTON	4,768,986	3,143,459	1,625,527	5,157,957	3,563,581	1,594,376	115,927	12-Apples, dairy prod, cattle/calves, wheat(55%)	
WEST VIRGINIA	400,384	69,406	330,978	386,335	74,285	312,050	5,236	46-Broilers, cattle/calves, turkeys, dairy prod (71%)	
WISCONSIN	5,378,700	1,417,171	3,961,529	5,582,296	1,656,284	3,926,012	183,840	10-Dairy prod, corn, cattle/calves, soybeans(78%)	
WYOMING	783,407	160,315	623,092	725,987	182,069	543,918	31,226	39-Cattle/calves, hay, sugar beets, sheep/lambs(83%)	
UNITED STATES	180,775,01	92,645,620	88,129,399	185,750,02	98,906,230	86,843,791	7,252,270	Cattle/calves, dairy prod, corn, hogs (46%)	

Appendix table 10 -- Net farm income for states, 1994-95

State	1994			1995		
	Gross farm income	Total production expenses	Net farm income	Gross farm income	Total production expenses	Net farm income
<i>1,000 dollars</i>						
ALABAMA	3,725,844	2,457,377	1,268,467	3,621,655	2,675,923	945,732
ALASKA	35,670	24,844	10,826	37,418	24,986	12,432
ARIZONA	2,025,814	1,559,760	466,054	2,389,835	1,675,158	714,677
ARKANSAS	6,047,130	4,567,168	1,479,962	5,843,430	4,480,788	1,362,642
CALIFORNIA	22,740,619	17,165,760	5,574,859	23,462,403	19,115,445	4,346,958
COLORADO	4,657,421	4,032,134	625,287	4,707,160	4,263,657	443,503
CONNECTICUT	537,234	367,144	170,090	548,401	380,728	167,673
DELAWARE	733,475	570,723	162,752	765,677	633,660	132,017
FLORIDA	6,306,390	4,087,247	2,219,143	6,143,092	4,438,215	1,704,877
GEORGIA	5,680,014	3,541,128	2,138,886	5,985,996	3,970,197	2,015,799
HAWAII	552,348	507,833	44,515	517,332	495,082	22,250
IDAHO	3,450,884	2,739,063	711,821	3,555,004	2,949,215	605,789
ILLINOIS	9,790,175	7,773,662	2,016,513	8,034,490	7,589,860	444,630
INDIANA	5,707,291	4,925,829	781,462	5,297,168	4,998,732	298,436
IOWA	13,166,085	10,189,960	2,976,125	11,991,702	10,223,752	1,767,950
KANSAS	9,051,969	7,347,004	1,704,965	8,573,677	7,684,279	889,398
KENTUCKY	3,906,364	2,696,805	1,209,559	3,728,918	2,775,939	952,979
LOUISIANA	2,489,712	1,983,910	505,802	2,435,081	1,913,714	521,367
MAINE	546,148	459,686	86,462	567,204	486,869	80,335
MARYLAND	1,601,476	1,299,199	302,277	1,657,800	1,416,102	241,698
MASSACHUSETTS	529,253	374,828	154,425	507,070	383,058	124,012
MICHIGAN	3,876,935	3,659,504	217,431	4,059,216	3,610,391	448,825
MINNESOTA	8,970,661	7,425,243	1,545,418	8,364,322	7,390,827	973,495
MISSISSIPPI	3,687,714	2,959,285	728,429	3,574,389	2,981,646	592,743
MISSOURI	5,481,665	4,609,416	872,249	5,070,691	4,748,546	322,145
MONTANA	2,424,176	1,937,107	487,069	2,407,430	2,015,804	391,626
NEBRASKA	9,987,960	7,794,670	2,193,290	9,649,809	8,078,180	1,571,629
NEVADA	363,851	302,880	60,971	342,350	302,958	39,392
NEW HAMPSHIRE	180,286	133,109	47,177	181,369	138,358	43,011
NEW JERSEY	904,131	645,586	258,545	927,054	677,508	249,546
NEW MEXICO	1,778,088	1,416,127	361,961	1,584,851	1,329,616	255,235
NEW YORK	3,159,629	2,739,552	420,077	3,250,552	2,887,000	363,552
NORTH CAROLINA	7,804,275	4,728,183	3,076,092	7,996,249	5,116,393	2,879,856
NORTH DAKOTA	3,980,798	3,121,360	859,438	3,572,209	3,174,572	397,637
OHIO	5,511,746	4,332,643	1,179,103	5,404,262	4,454,204	950,058
OKLAHOMA	4,792,912	3,707,350	1,085,562	4,332,539	3,834,914	497,625
OREGON	3,586,512	2,967,053	619,459	3,583,102	3,201,960	381,142
PENNSYLVANIA	4,232,100	3,520,939	711,161	4,265,253	3,722,698	542,555
RHODE ISLAND	89,949	46,958	42,991	90,897	48,322	42,575
SOUTH CAROLINA	1,673,439	1,145,503	527,936	1,645,409	1,256,631	388,778
SOUTH DAKOTA	4,249,782	2,973,942	1,275,840	3,724,489	3,051,876	672,613
TENNESSEE	2,749,325	2,073,771	675,554	2,628,225	2,164,479	463,746
TEXAS	15,347,097	11,609,970	3,737,127	15,706,261	13,287,230	2,419,031
UTAH	1,028,735	780,458	248,277	992,889	811,597	181,292
VERMONT	532,553	420,356	112,197	540,259	439,829	100,430
VIRGINIA	2,602,982	1,970,751	632,231	2,599,147	2,068,493	530,654
WASHINGTON	5,607,501	4,527,733	1,079,768	5,961,650	5,046,851	914,799
WEST VIRGINIA	506,542	430,027	76,515	478,982	443,157	35,825
WISCONSIN	6,532,387	5,992,840	539,547	6,180,846	5,896,526	284,320
WYOMING	915,216	800,587	114,629	913,970	824,624	89,346
UNITED STATES	215,840,263	167,443,967	48,396,296	210,399,184	175,580,549	34,818,635

Appendix table 11-- State rankings for net farm income: total, per farming operation and per acre, 1995

Rank	Total		Per Operation		Per Acre	
	State	Value (\$1000)	State	Value (\$1000)	State	Value (Dollars)
1	CALIFORNIA	4,346,958	ARIZONA	96,578	RHODE ISLAND	676
2	NORTH CAROLINA	2,879,856	RHODE ISLAND	60,821	CONNECTICUT	441
3	TEXAS	2,419,031	CALIFORNIA	54,337	NORTH CAROLINA	313
4	GEORGIA	2,015,799	DELAWARE	52,807	NEW JERSEY	294
5	IOWA	1,767,950	NORTH CAROLINA	49,653	DELAWARE	232
6	FLORIDA	1,704,877	GEORGIA	44,796	MASSACHUSETTS	218
7	NEBRASKA	1,571,629	CONNECTICUT	44,124	GEORGIA	168
8	ARKANSAS	1,362,642	FLORIDA	43,715	FLORIDA	166
9	MINNESOTA	973,495	ARKANSAS	31,689	CALIFORNIA	145
10	KENTUCKY	952,979	IDAHO	28,176	MARYLAND	110
11	OHIO	950,058	NEBRASKA	28,065	NEW HAMPSHIRE	98
12	ALABAMA	945,732	NEW JERSEY	27,727	ALABAMA	93
13	WASHINGTON	914,799	WASHINGTON	25,411	ARKANSAS	91
14	KANSAS	889,398	ALASKA	23,908	SOUTH CAROLINA	77
15	ARIZONA	714,677	MASSACHUSETTS	20,669	VERMONT	73
16	SOUTH DAKOTA	672,613	SOUTH DAKOTA	20,382	PENNSYLVANIA	70
17	IDAHO	605,789	ALABAMA	20,122	KENTUCKY	68
18	MISSISSIPPI	592,743	LOUISIANA	19,310	OHIO	63
19	PENNSYLVANIA	542,555	NEW MEXICO	18,906	VIRGINIA	62
20	VIRGINIA	530,654	NEW HAMPSHIRE	18,700	LOUISIANA	61
21	LOUISIANA	521,367	MONTANA	17,801	MAINE	60
22	OKLAHOMA	497,625	COLORADO	17,740	WASHINGTON	58
23	TENNESSEE	463,746	IOWA	17,680	IOWA	53
24	MICHIGAN	448,825	SOUTH CAROLINA	17,672	NEW YORK	47
25	ILLINOIS	444,630	MARYLAND	16,902	MISSISSIPPI	46
26	COLORADO	443,503	VERMONT	16,738	IDAHO	45
27	NORTH DAKOTA	397,637	NEVADA	15,757	MICHIGAN	42
28	MONTANA	391,626	MISSISSIPPI	14,113	TENNESSEE	39
29	SOUTH CAROLINA	388,778	UTAH	13,529	NEBRASKA	33
30	OREGON	381,142	KANSAS	13,476	MINNESOTA	33
31	NEW YORK	363,552	OHIO	12,839	OREGON	22
32	MISSOURI	322,145	NORTH DAKOTA	12,426	ARIZONA	20
33	INDIANA	298,436	TEXAS	11,975	INDIANA	19
34	WISCONSIN	284,320	VIRGINIA	11,291	TEXAS	19
35	NEW MEXICO	255,235	MINNESOTA	11,190	KANSAS	19
36	NEW JERSEY	249,546	PENNSYLVANIA	10,851	WISCONSIN	17
37	MARYLAND	241,698	KENTUCKY	10,708	UTAH	16
38	UTAH	181,292	MAINE	10,570	ILLINOIS	16
39	CONNECTICUT	167,673	NEW YORK	10,099	SOUTH DAKOTA	15
40	DELAWARE	132,017	OREGON	9,900	OKLAHOMA	15
41	MASSACHUSETTS	124,012	WYOMING	9,712	HAWAII	14
42	VERMONT	100,430	MICHIGAN	8,312	COLORADO	14
43	WYOMING	89,346	OKLAHOMA	7,009	ALASKA	14
44	MAINE	80,335	ILLINOIS	5,774	MISSOURI	11
45	NEW HAMPSHIRE	43,011	TENNESSEE	5,725	NORTH DAKOTA	10
46	RHODE ISLAND	42,575	INDIANA	4,813	WEST VIRGINIA	10
47	NEVADA	39,392	HAWAII	4,635	MONTANA	7
48	WEST VIRGINIA	35,825	WISCONSIN	3,554	NEW MEXICO	6
49	HAWAII	22,250	MISSOURI	3,068	NEVADA	4
50	ALASKA	12,432	WEST VIRGINIA	1,791	WYOMING	3
	UNITED STATES	34,818,635	UNITED STATES	16,808	UNITED STATES	36

Appendix table 12a--U.S. feed grains production cash costs and returns, 1994-95

Item	Corn		Grain Sorghum		Oats		Barley	
	1994	1995	1994	1995	1994	1995	1994	1995
<i>Dollars per planted acre</i>								
Gross value of production (excluding direct Government payments):								
Primary product	296.32	321.98	127.16	136.39	68.06	72.87	107.12	134.65
Secondary product	0.00	0.00	0.00	0.00	32.03	27.51	4.50	4.26
Total, gross value of production	296.32	321.98	127.16	136.39	100.09	100.38	111.62	138.91
Cash expenses:								
Seed	22.67	23.98	6.43	5.94	8.19	7.46	6.96	7.44
Fertilizer, lime, and gypsum	46.07	55.85	20.28	25.72	14.95	15.76	16.57	20.50
Chemicals	25.22	26.34	14.26	14.64	1.59	1.72	8.68	9.12
Custom operations ¹	10.05	9.65	4.46	4.22	4.84	4.30	4.27	4.88
Fuel, lube, and electricity	18.96	17.92	13.30	12.57	6.84	6.38	11.43	12.08
Repairs	16.13	15.91	13.13	12.91	10.96	10.31	13.30	13.80
Hired labor	7.54	8.03	8.12	8.39	1.91	1.76	4.75	4.99
Other variable cash expenses ²	0.44	0.45	0.41	0.42	1.19	1.02	1.72	1.86
Total, variable cash expenses	147.08	158.13	80.39	84.81	50.47	48.71	67.68	74.67
General farm overhead	13.49	12.46	9.25	10.08	5.41	5.65	6.72	7.98
Taxes and insurance	20.68	20.01	13.38	13.93	13.95	13.88	12.27	13.20
Interest	15.96	16.73	11.49	13.69	4.95	5.57	9.82	12.79
Total, fixed cash expenses	50.13	49.20	34.12	37.70	24.31	25.10	28.81	33.97
Total, cash expenses	197.21	207.33	114.51	122.51	74.78	73.81	96.49	108.64
Gross value of production less cash expenses	99.11	114.65	12.65	13.88	25.31	26.57	15.13	30.27
Harvest-period price (\$/bu.)	2.07	2.78	1.92	2.80	1.25	1.30	2.07	2.53
Yield (bu.)	143.15	115.82	66.23	48.71	54.45	56.05	51.75	53.22

Appendix table 12b--U.S. feed grains production economic costs and returns, 1994-95

Item	Corn		Grain Sorghum		Oats		Barley	
	1994	1995	1994	1995	1994	1995	1994	1995
<i>Dollars per planted acre</i>								
Gross value of production (excluding direct Government payments):								
Primary product	296.32	321.98	127.16	136.39	68.06	72.87	107.12	134.65
Secondary product	0.00	0.00	0.00	0.00	32.03	27.51	4.50	4.26
Total, gross value of production	296.32	321.98	127.16	136.39	100.09	100.38	111.62	138.91
Economic (full ownership) costs:								
Variable cash expenses	147.08	158.13	80.39	84.81	50.47	48.71	67.68	74.67
General farm overhead	13.49	12.46	9.25	10.08	5.41	5.65	6.72	7.98
Taxes and insurance	20.68	20.01	13.38	13.93	13.95	13.88	12.27	13.20
Capital replacement	32.96	32.71	27.96	27.58	19.80	18.58	27.14	28.30
Operating capital	3.43	4.42	1.87	2.37	1.18	0.70	1.58	2.09
Other nonland capital	13.32	13.18	14.64	14.42	11.76	11.43	14.41	14.89
Land	66.48	67.28	25.75	26.50	28.69	26.72	34.83	39.37
Unpaid labor	24.03	25.23	18.64	19.13	14.98	14.30	6.37	6.64
Total, economic costs	321.47	333.42	191.88	198.82	146.24	139.97	171.00	187.14
Residual returns to management and risk	-25.15	-11.44	-64.72	-62.43	-46.15	-39.60	-59.38	-48.23
Harvest-period price (\$/bu.)	2.07	2.78	1.92	2.80	1.25	1.30	2.07	2.53
Yield (bu.)	143.15	115.82	66.23	48.71	54.45	56.05	51.75	53.22

¹ Includes technical services and commercial drying.

² Cost of purchased irrigation water and baling.

Appendix table 13a--U.S. food grain and sugar crops production cash costs and returns, 1994-95

Item	Wheat		Rice		Sugar beets		Sugarcane	
	1994	1995	1994	1995	1994	1995	1994	1995
	Dollars per planted acre				\$ /harvested acre			
Gross value of production (excluding direct Government payments):								
Primary product	105.54	130.23	402.56	488.66	847.39	758.54	975.28	973.24
Secondary product (straw, tops, etc.)	4.55	4.44	0.00	0.00	1.12	0.75	0.00	0.00
Total, gross value of production	110.09	134.67	402.56	488.66	848.51	759.29	975.28	973.24
Cash expenses:								
Seed	7.46	7.57	28.14	19.23	37.92	39.59	35.71	37.79
Fertilizer, lime, and gypsum	16.70	20.89	45.72	54.96	60.39	70.10	63.63	70.66
Chemicals	5.69	5.86	58.33	65.11	70.07	71.22	66.01	67.68
Custom operations ¹	5.70	5.96	45.71	45.15	44.55	40.28	56.70	59.68
Fuel, lube, and electricity	8.55	8.47	62.29	57.42	40.56	39.08	25.38	25.98
Repairs	11.69	12.20	27.90	28.51	39.54	38.66	96.89	96.21
Hired labor	3.83	4.01	33.33	32.52	98.92	99.75	337.78	330.75
Drying	na	na	30.46	28.37	na	na	na	na
Purchased irrigation water	na	na	11.08	11.40	9.29	9.12	5.50	5.61
Freight & dirt hauling charges	na	na	na	na	13.77	13.41	0.00	0.00
Miscellaneous	0.36	0.38	0.00	0.00	11.34	11.53	8.98	7.22
Hauling allowance (-)	na	na	na	na	-7.05	-6.87	-7.29	-7.85
Total, variable cash expenses	59.98	65.34	342.96	342.67	419.30	425.87	689.29	693.73
General farm overhead	5.36	7.00	28.36	29.91	38.87	40.65	91.87	88.06
Taxes and insurance	9.29	10.08	29.02	29.30	42.77	44.84	37.54	36.63
Interest	7.84	10.94	23.42	26.77	45.40	52.00	11.75	13.39
Total, fixed cash expenses	22.49	28.02	80.80	85.98	127.04	137.49	141.16	138.08
Total, cash expenses	82.47	93.36	423.76	428.65	546.34	563.36	830.45	831.81
Gross value of production less cash expenses	27.62	41.31	-21.20	60.01	302.17	195.93	144.83	141.43
Harvest-period price (\$/bu. wheat, cwt. rice, or sugar beets and sugarcane) ²	3.16	4.08	6.58	8.77	38.80	38.80	29.20	29.20
Yield (bu. wheat, cwt. rice, or net ton sugar sugarcane) ³	33.40	31.92	61.18	55.72	21.84	19.55	33.40	33.33

Appendix table 13b--U.S. food grain and sugar crops production economic costs and returns, 1994-95

Item	Wheat		Rice		Sugar beets		Sugarcane	
	1994	1995	1994	1995	1994	1995	1994	1995
	Dollars per planted acre				\$ /harvested acre			
Gross value of production (excluding direct Government payments):								
Primary product	105.54	130.23	402.56	488.66	847.39	758.54	975.28	973.24
Secondary product (straw, tops, etc.)	4.55	4.44	0.00	0.00	1.12	0.75	0.00	0.00
Total, gross value of production	110.09	134.67	402.56	488.66	848.51	759.29	975.28	973.24
Economic (full ownership) costs:								
Variable cash expenses	59.98	65.34	342.96	342.67	419.30	425.87	689.29	693.73
General farm overhead	5.36	7.00	28.36	29.91	38.87	40.65	91.87	88.06
Taxes and insurance	9.29	10.08	29.02	29.30	42.77	44.84	37.54	36.63
Capital replacement	21.87	22.81	57.61	58.87	52.31	51.29	74.09	77.33
Operating capital	1.40	1.83	8.00	9.59	9.77	11.90	16.06	19.39
Other nonland capital	11.52	11.95	21.14	21.08	28.02	27.43	29.32	30.74
Land	36.90	42.51	93.54	113.49	129.52	127.46	125.82	153.32
Return to coop share	na	na	na	na	20.68	25.90	na	na
Unpaid labor	8.20	8.51	25.07	25.26	43.43	45.13	14.80	15.50
Total, economic costs	154.52	170.03	605.70	630.17	784.67	800.47	1,078.79	1,114.70
Residual returns to management and risk	-44.43	-35.36	-203.14	-141.51	63.84	-41.18	-103.51	-141.46
Harvest-period price (\$/bu. wheat, cwt. rice, or sugar beets and sugarcane) ²	3.16	4.08	6.58	8.77	38.80	38.80	29.20	29.20
Yield (bu. wheat, cwt. rice, or net ton sugar sugarcane) ³	33.40	31.92	61.18	55.72	21.84	19.55	33.40	33.33

¹ Includes technical services.

² 1995 season-average sugar prices are not available.

³ Sugarcane yields are on a per-harvested-acre basis rather than a per-planted-acre basis. na = not applicable.

Appendix table 14a--U.S. oilseeds and cotton production cash costs and returns, 1994-95

Item	Soybeans		Peanuts		Cotton	
	1994	1995	1994	1995	1994	1995
Dollars per planted acre						
Gross value of production (excluding direct Government payments):						
Primary product	219.56	218.54	739.49	666.40	421.04	339.85
Secondary product	0.00	0.00	8.65	7.87	56.35	48.94
Total, gross value of production	219.56	218.54	748.14	674.27	477.39	388.79
Cash expenses:						
Seed	13.84	13.32	78.57	72.19	14.79	15.67
Fertilizer, lime, and gypsum	9.25	9.76	44.53	46.97	38.16	44.89
Chemicals	24.45	24.82	90.97	94.06	49.87	50.43
Custom operations ¹	3.73	3.65	8.76	9.26	19.59	21.69
Fuel, lube, and electricity	7.93	7.64	33.07	28.65	31.03	38.31
Repairs	10.50	10.68	29.91	30.13	25.67	28.59
Hired labor	6.02	6.01	47.52	47.63	39.47	39.91
Drying or ginning	na	na	16.58	14.70	52.74	53.13
Other variable cash expenses ²	0.04	0.05	0.58	0.59	5.63	5.79
Total, variable cash expenses	75.76	75.93	350.49	344.18	276.95	298.41
General farm overhead	11.03	11.58	17.85	18.86	17.05	18.20
Taxes and insurance	18.69	18.64	16.59	16.87	22.35	23.33
Interest	13.17	15.02	38.57	44.00	17.68	20.48
Total, fixed cash expenses	42.89	45.24	73.01	79.73	57.08	62.01
Total, cash expenses	118.65	121.17	423.50	423.91	334.03	360.42
Gross value of production less cash expenses	100.91	97.37	324.64	250.36	143.36	28.37
Harvest-period price (\$/bu. soybeans, lbs. peanuts and cotton)	5.32	6.26	0.28	0.29	0.64	0.70
Yield (bu. soybeans, lbs. peanuts and cotton)	41.27	34.91	2,641.03	2,297.94	657.87	485.50

Appendix table 14b--U.S. oilseeds and cotton production economic costs and returns, 1994-95

Item	Soybeans		Peanuts		Cotton	
	1994	1995	1994	1995	1994	1995
Dollars per planted acre						
Gross value of production: (excluding direct Government payments):						
Primary product	219.56	218.54	739.49	666.40	421.04	339.85
Secondary product	0.00	0.00	8.65	7.87	56.35	48.94
Total, gross value of production	219.56	218.54	748.14	674.27	477.39	388.79
Economic (full ownership) costs:						
Variable cash expenses	75.76	75.93	350.49	344.18	276.95	298.41
General farm overhead	11.03	11.58	17.85	18.86	17.05	18.2
Taxes and insurance	18.69	18.64	16.59	16.87	22.35	23.33
Capital replacement	22.79	23.25	50.36	50.82	49.21	54.79
Operating capital	1.76	2.12	8.17	9.54	6.45	8.34
Other nonland capital	13.38	13.62	26.81	26.98	17.66	19.66
Land	56.21	55.30	98.88	107.18	47.45	45.61
Peanut quota	na	na	118.34	116.52	na	na
Unpaid labor	18.78	19.35	43.48	43.40	27.14	33.73
Total, economic costs	218.40	219.79	730.97	734.35	464.26	502.07
Residual returns to management and risk	1.16	-1.25	17.17	-60.08	13.13	-113.28
Harvest-period price (\$/bu. soybeans, lbs.	5.32	6.26	0.28	0.29	0.64	0.7
Yield (bu. soybeans, lbs. peanuts and cotton)	41.27	34.91	2,641.03	2,297.94	657.87	485.5

¹ Includes technical services.

² Cost of purchased irrigation water.

na = not applicable

Appendix table 15--U.S. tobacco production cash costs and returns, 1994-95

Item	Flue-cured		Burley	
	1994 ¹	1995 ²	1994 ¹	1995 ²
Dollars per planted acre				
Gross value of production:	4,109.16	3,460.07	4,234.30	3,732.44
Variable costs:				
Labor ³	705.17	725.12	1,409.06	1,448.94
Noncash benefits ⁴	23.79	24.68	15.31	15.88
Fertilizer and lime ⁵	196.27	225.90	243.89	280.71
Plant bed materials ⁶	45.49	46.11	76.28	77.32
Chemicals ⁷	212.80	218.50	92.78	95.27
Custom operations	7.81	8.15	10.86	11.34
Fuel and lubrication ⁸	55.26	59.86	101.63	102.56
Curing fuel and electricity ⁹	274.97	297.89	7.19	7.78
Repairs ¹⁰	140.33	142.88	103.62	103.14
Warehouse fee	108.89	91.69	222.30	195.95
No-net-cost & marketing assessment	72.60	15.46	103.50	20.23
Inspection and grading fee	16.94	16.04	16.10	16.79
Interest	21.13	22.44	17.08	17.96
Other ¹¹	3.74	3.81	21.23	21.62
Total, variable costs	1,885.19	1,898.53	2,440.83	2,415.49
Machinery and barn ownership costs:				
Capital replacement	289.72	320.71	273.31	302.54
Return to other nonland capital	98.78	103.31	109.81	114.85
Taxes and insurance	134.22	140.21	125.06	130.65
Total ownership costs	522.72	564.23	508.18	548.04
Other costs:				
General farm overhead	266.04	224.02	419.20	369.51
Land and quota charge ¹²	979.05	798.47	1,362.54	1,200.04
Total excluding land and quota	2,673.95	2,686.78	3,368.21	3,333.04
Yield (lbs./ acre)	2,420	1,933	2,300	2,023

¹ Preliminary.

² Revised. Major changes in preliminary estimates published September 1995 were due to NASS yield revisions and changes in indices.

³ Includes operator, family, exchange, and hired labor valued at prevailing hired wage rates.

⁴ Includes rental values of housing, personal property, utilities, drinks, snacks, and field toilets.

⁵ Includes custom costs if they could not be separated.

⁶ Includes plant bed seed, fertilizer, pesticides, fumigants, and purchased plants.

⁷ Includes insecticides herbicides, fungicides, pesticides, and growth regulators. Also includes custom costs if they could not be separated.

⁸ Includes tractors, machinery, and irrigation fuel and lubrication.

⁹ Includes cost of LP gas, fuel oil, or diesel, and electricity used to cure tobacco.

¹⁰ Includes machinery, equipment, irrigation and barn repairs.

¹¹ Includes cover crop seed, sticks, and twine.

¹² Weighted average of cash and share rents.

Appendix table 16a--U.S. cow-calf production cash costs and returns, 1994-95

Item	1994	1995
	\$ /bred cow	
Gross value of production:		
Steer calves	55.57	44.94
Heifer calves	46.50	37.80
Yearling steers	120.34	105.94
Yearling heifers	66.06	58.35
Other cattle	100.74	84.89
Total, gross value of production	389.21	331.92
Cash expenses:		
Feeder cattle	13.28	11.67
Feed--		
Grain	6.93	9.76
Protein supplements	25.83	24.03
By-products	7.61	7.69
Harvested forages	79.94	80.87
Pasture	86.77	73.86
Total feed costs	207.08	196.21
Other--		
Veterinary and medicine	18.32	18.23
Livestock hauling	4.32	4.32
Marketing	4.30	4.30
Custom feed mixing	0.22	0.22
Fuel, lube	18.43	19.11
Machinery and building repairs	28.79	31.06
Hired labor	29.62	30.91
Other variable cash expenses	5.55	5.79
Total, variable cash expenses	329.91	321.82
General farm overhead	36.49	38.56
Taxes and insurance	15.60	15.96
Interest	30.07	34.31
Total, fixed cash expenses	82.16	88.83
Total, cash expenses	412.07	410.65
Gross value of production less cash expenses	-22.86	-78.73

Appendix table 16b--U.S. cow-calf production economic costs and returns, 1994-95

Item	1994	1995
	\$ /bred cow	
Gross value of production:	389.21	331.92
Economic (full ownership) costs:		
Variable cash expenses	329.91	321.82
General farm overhead	36.49	38.56
Taxes and insurance	15.60	15.96
Capital replacement	83.99	84.89
Operating capital	11.53	13.49
Other nonland capital	36.77	37.59
Land	0.04	0.04
Unpaid labor	89.99	92.42
Total, economic costs	604.32	604.77
Residual returns to management and risk	-215.11	-272.85

Appendix table 17a--U.S. milk production cash costs and returns, 1994-95

Item	1994	1995
	\$ /cwt	
Gross value of production:		
Milk	12.99	12.80
Cattle	1.00	0.87
Other income ¹	0.51	0.60
Total, gross value of production	14.50	14.27
Cash expenses:		
Feed--		
Concentrates	3.69	3.51
By-products	0.21	0.21
Liquid whey	0.11	0.13
Hay	1.63	1.44
Silage	1.41	1.23
Pasture and other forage	0.12	0.12
Total feed costs	7.17	6.64
Other--		
Hauling	0.45	0.46
Artificial insemination	0.15	0.15
Veterinary and medicine	0.38	0.38
Bedding and litter	0.23	0.24
Marketing	0.37	0.38
Custom services and supplies	0.43	0.43
Fuel, lube, and electricity	0.49	0.49
Machinery and building repairs	0.76	0.78
Hired labor	0.67	0.64
DHIA fees	0.08	0.08
Dairy assessment	0.17	0.16
Total, variable cash expenses	11.35	10.83
General farm overhead	0.52	0.54
Taxes and insurance	0.29	0.29
Interest	0.74	0.83
Total, fixed cash expenses	1.55	1.66
Total, cash expenses	12.90	12.49
Gross value of production less cash expenses	1.60	1.78

Appendix table 17b--U.S. milk production economic costs and returns, 1994-95

Item	1994	1995
	\$ /cwt	
Gross value of production:	14.50	14.27
Economic (full ownership) costs:		
Variable cash expenses	11.35	10.83
General farm overhead	0.52	0.54
Taxes and insurance	0.29	0.29
Capital replacement	2.03	2.07
Operating capital	0.09	0.10
Other nonland capital	0.92	0.94
Land	0.00	0.01
Unpaid labor	1.29	1.19
Total, economic costs	16.49	15.97
Residual returns to management and risk	-1.99	-1.70

¹ Includes the dairy's share of receipts from cooperative patronage dividends, assessment refunds, renting or leasing of dairy animals, the estimated value of manure as a fertilizer, and insurance indemnity payments.

Appendix table 18a--U.S. hog production cash costs and returns, 1994-95

Item	All hogs		Farrow to finish		Farrow to feeder pig		Feeder pig to finish	
	1994	1995	1994	1995	1994	1995	1994	1995
Dollars per hundredweight gain ¹								
Gross value of production:								
Market hogs	36.29	38.45	37.47	39.76	0.86	0.92	49.87	52.82
Feeder pigs	4.52	4.57	0.40	0.41	64.03	62.08	0.05	0.05
Cull stock	2.31	2.22	2.19	2.06	5.53	5.32	0.02	0.02
Breeding stock	2.11	2.01	0.18	0.17	0.11	0.11	0.01	0.01
Inventory change	0.44	-0.20	0.41	-0.26	0.38	0.02	0.75	0.18
Other income ²	1.13	1.32	1.18	1.38	1.23	1.43	0.95	1.06
Total, gross value of production	46.80	48.37	41.83	43.52	72.14	69.88	51.65	54.14
Cash expenses:								
Feed--								
Grain	11.54	12.28	11.98	12.85	13.82	14.19	9.43	9.66
Protein sources	9.35	7.96	10.15	8.68	9.53	8.33	5.69	4.65
Complete mixes	5.69	5.83	4.16	4.19	14.99	15.19	7.76	8.33
Other feed items ³	0.59	0.56	0.55	0.54	0.76	0.68	0.36	0.32
Total feed costs	27.17	26.63	26.84	26.26	39.10	38.39	23.24	22.96
Other--								
Feeder pigs	3.35	3.31	0.14	0.13	0.03	0.03	18.26	17.71
Veterinary and medicine	1.36	1.41	1.20	1.22	4.65	4.89	0.73	0.75
Bedding and litter	0.08	0.08	0.06	0.06	0.19	0.20	0.11	0.11
Marketing	0.56	0.59	0.46	0.47	2.60	2.76	0.42	0.44
Custom services and supplies	0.47	0.50	0.40	0.42	1.32	1.47	0.38	0.40
Fuel, lube, and electricity	1.56	1.58	1.48	1.50	4.61	4.67	0.76	0.76
Repairs	1.36	1.40	1.34	1.38	2.87	2.90	0.90	0.90
Hired labor	2.53	2.55	2.31	2.29	6.93	7.44	0.89	0.79
Total, variable cash expenses	38.44	38.05	34.23	33.73	62.30	62.75	45.69	44.82
General farm overhead	1.64	1.91	1.45	1.70	2.94	3.44	1.39	1.60
Taxes and insurance	0.95	1.06	0.87	0.96	1.96	2.21	0.91	1.02
Interest	2.39	3.00	2.14	2.68	4.55	5.91	2.55	3.12
Total, fixed cash expenses	4.98	5.97	4.46	5.34	9.45	11.56	4.85	5.74
Total, cash expenses	43.42	44.02	38.69	39.07	71.75	74.31	50.54	50.56
Gross value of production less cash expenses	3.38	4.35	3.14	4.45	0.39	-4.43	1.11	3.58

Appendix table 18b--U.S. hog production economic costs and returns, 1994-95

Item	All hogs		Farrow to finish		Farrow to feeder pig		Feeder pig to finish	
	1994	1995	1994	1995	1994	1995	1994	1995
Dollars per hundredweight gain 1/								
Gross value of production:								
Market hogs	36.29	38.45	37.47	39.76	0.86	0.92	49.87	52.82
Feeder pigs	4.52	4.57	0.40	0.41	64.03	62.08	0.05	0.05
Cull stock	2.31	2.22	2.19	2.06	5.53	5.32	0.02	0.02
Breeding stock	2.11	2.01	0.18	0.17	0.11	0.11	0.01	0.01
Inventory change	0.44	-0.20	0.41	-0.26	0.38	0.02	0.75	0.18
Other income ²	1.13	1.32	1.18	1.38	1.23	1.43	0.95	1.06
Total, gross value of production	46.80	48.37	41.83	43.52	72.14	69.88	51.65	54.14
Economic (full ownership) costs:								
Variable cash expenses	38.44	38.05	34.23	33.73	62.30	62.75	45.69	44.82
General farm overhead	1.64	1.91	1.45	1.70	2.94	3.44	1.39	1.60
Taxes and insurance	0.95	1.06	0.87	0.96	1.96	2.21	0.91	1.02
Capital replacement	10.86	11.26	10.54	10.95	24.13	25.13	7.47	7.68
Operating capital	0.90	1.06	0.80	0.94	1.45	1.75	1.06	1.25
Other nonland capital	3.93	4.09	3.84	3.98	8.10	8.46	2.89	3.00
Land	0.24	0.21	0.25	0.22	0.51	0.44	0.11	0.10
Unpaid labor	4.80	4.93	4.59	4.75	10.30	10.48	4.22	4.18
Total, economic (full-ownership) costs	61.76	62.57	56.57	57.23	111.69	114.66	63.74	63.65
Residual returns to management and risk	-14.96	-14.20	-14.74	-13.71	-39.55	-44.78	-12.09	-9.51

¹ Cwt gain = (cwt sold - cwt purchased) + cwt inventory change.

² Value of manure production.

³ Milk replacer, milk, milk by-products, antibiotics, and other medicated additives.

Appendix table 19a--U.S. feed grains production cash costs and returns, 1994-95 (including direct Government payments)

Item	Corn		Grain sorghum		Barley	
	1994	1995	1994	1995	1994	1995
Dollars per planted acre						
Gross value of production						
Market value of primary product	296.32	321.98	127.16	136.39	107.12	134.65
Direct government payments ¹	42.19	1.14	28.80	3.02	17.27	1.31
Haying/grazing on ACR and CU acreage plus any secondary products	0.11	0.62	1.56	1.06	4.81	4.64
Total, gross value of production	338.62	323.74	157.52	140.47	129.20	140.60
Cash expenses:						
Seed	22.67	23.98	6.43	5.94	6.96	7.44
Fertilizer, lime, and gypsum	46.07	55.85	20.28	25.72	16.57	20.50
Chemicals	25.25	26.52	14.75	15.07	9.56	10.18
Custom operations ²	10.05	9.65	4.46	4.22	4.27	4.88
Fuel, lube, and electricity	19.02	18.26	14.57	13.79	13.05	14.02
Repairs	16.15	16.03	14.25	14.00	14.93	15.81
Hired labor	7.56	8.13	8.84	9.15	5.21	5.54
Other variable cash expenses ³	0.59	1.22	0.94	0.79	2.07	2.31
Total, variable cash expenses	147.36	159.64	84.52	88.68	72.62	80.68
General farm overhead	14.93	12.36	10.32	10.68	7.53	8.00
Taxes and insurance	21.53	21.23	15.39	14.69	14.63	15.11
Interest	17.34	16.28	12.81	14.49	10.87	12.67
Total, fixed cash expenses	53.80	49.87	38.52	39.86	33.03	35.78
Total, cash expenses	201.16	209.51	123.04	128.54	105.65	116.46
Gross value of production less cash expenses	137.46	114.23	34.48	11.93	23.55	24.14
Harvest-period price (\$/bu.)	2.07	2.78	1.92	2.80	2.07	2.53
Yield (bu.)	143.15	115.82	66.23	48.71	51.75	53.22
Percent of planted primary crop acres in program	74	69	74	70	69	67

Appendix table 19b--U.S. feed grains production economic costs and returns, 1994-95 (including direct Government payments)

Item	Corn		Grain sorghum		Barley	
	1994	1995	1994	1995	1994	1995
Dollars per planted acre						
Gross value of production (including direct Government payments):						
Market value of primary product	296.32	321.98	127.16	136.39	107.12	134.65
Direct government payments ¹	42.19	1.14	28.80	3.02	17.27	1.31
Haying/grazing on ACR and CU acreage plus any secondary products	0.11	0.62	1.56	1.06	4.81	4.64
Total, gross value of production	338.62	323.74	157.52	140.47	129.20	140.60
Economic (full ownership) costs:						
Variable cash expenses	147.36	159.64	84.52	88.68	72.62	80.68
General farm overhead	14.93	12.36	10.32	10.68	7.53	8.00
Taxes and insurance	21.53	21.23	15.39	14.69	14.63	15.11
Capital replacement	32.98	32.83	30.49	30.05	28.75	30.28
Operating capital	3.43	4.46	2.03	2.57	1.69	2.25
Other nonland capital	13.37	13.46	15.91	15.65	15.41	16.12
Land	75.87	68.71	27.63	28.40	42.33	46.02
Unpaid labor	24.07	25.53	20.02	20.58	7.15	7.62
Total, economic costs	333.54	338.22	206.31	211.30	190.11	206.08
Residual returns to management and risk	5.08	-14.48	-48.79	-70.83	-60.91	-65.48
Harvest-period price (\$/bu.)	2.07	2.78	1.92	2.80	2.07	2.53
Yield (bu.)	143.15	115.82	66.23	48.71	51.75	53.22
Percent of planted primary crop acres in program	74.00	69.00	74.00	70.00	69.00	67.00

¹ Deficiency payments. Payments are not adjusted for payment limitations. For 1995, only those using 0/85/92 option received payment.

² Includes technical services and commercial drying. ³ Cost of purchased irrigation water, baling, cover crop seed, and other input items.

Appendix table 20a--U.S. cotton and rice production cash costs and returns, 1994-95 (including direct Government payments)

Item	Cotton		Rice	
	1994	1995	1994	1995
Dollars per planted acre				
Gross value of production (including direct Government payments):				
Marketing value of primary product	421.04	339.85	402.56	488.66
Cottonseed	56.35	48.94	n/a	n/a
Direct Government payments ¹	25.01	0.00	198.55	146.19
Marketing loan proceeds	0.00	0.00	0.00	0.00
Haying/grazing on ACR and CU acreage	0.49	0.58	0.05	0.04
Total, gross value of production	502.89	389.37	601.16	634.89
Cash expenses:				
Seed	15.33	16.24	28.14	19.23
Fertilizer, lime, and gypsum	38.16	44.89	45.73	54.96
Chemicals	49.87	50.43	58.43	66.02
Custom operations ²	19.75	21.87	45.72	44.36
Fuel, lube, and electricity	31.21	38.55	64.13	59.13
Repairs	25.96	34.57	31.92	32.84
Hired labor	39.64	40.09	38.26	37.63
Ginning or drying	52.74	53.13	30.46	28.37
Other variable cash expenses ³	5.79	5.86	11.09	11.40
Total, variable cash expenses	278.45	305.63	353.88	353.94
General farm overhead	17.68	18.26	32.88	35.03
Taxes and insurance	23.18	23.41	33.64	34.32
Interest	18.34	20.54	27.14	31.36
Total, fixed cash expenses	59.20	62.21	93.66	100.71
Total, cash expenses	337.65	367.84	447.54	454.65
Gross value of production less cash expenses	165.24	21.53	153.62	180.24
Harvest-period price (lbs. cotton or cwt rice)	0.64	0.70	6.58	8.77
Yield (lbs. cotton or cwt. rice/planted acre)	657.87	485.50	61.18	55.72
Percent of planted primary crop acres in program	89	75	94	95

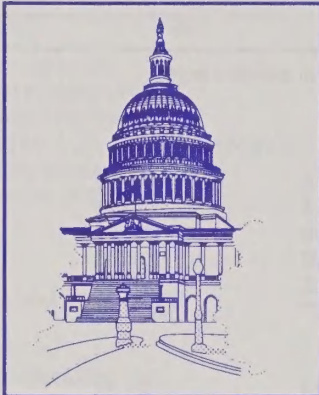
Appendix table 20b--U.S. cotton and rice production economic costs and returns, 1994-95 (including direct Government payments)

Item	Cotton		Rice	
	1994	1995	1994	1995
Dollars per planted acre				
Gross value of production (including direct Government payments):	502.89	389.37	601.16	634.89
Economic (full ownership) costs:				
Variable cash expenses	278.45	305.63	353.88	353.94
General farm overhead	17.68	18.26	32.88	35.03
Taxes and insurance	23.18	23.41	33.64	34.32
Capital replacement	49.58	55.20	66.09	67.90
Operating capital	6.49	8.54	9.17	11.08
Other nonland capital	17.83	19.85	24.12	24.25
Land	45.10	43.35	106.55	129.71
Unpaid labor	29.86	37.10	28.74	29.25
Total, economic costs	468.17	511.34	655.07	685.48
Residual returns to management and risk	34.72	-121.97	-53.91	-50.59
Harvest-period price (lbs. cotton or cwt rice)	0.64	0.7	6.58	8.77
Yield (lbs. cotton or cwt. rice/planted acre)	657.87	485.5	61.18	55.72
Percent of planted primary crop acres in program	89	75	94	95

¹ Deficiency payments. Payments are not adjusted for payment limitations.

² Includes technical services.

³ Cost of purchased irrigation water, baling, and cover crop seed.



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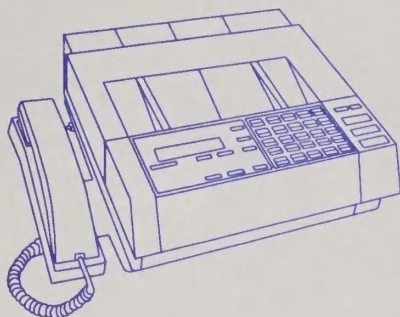
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